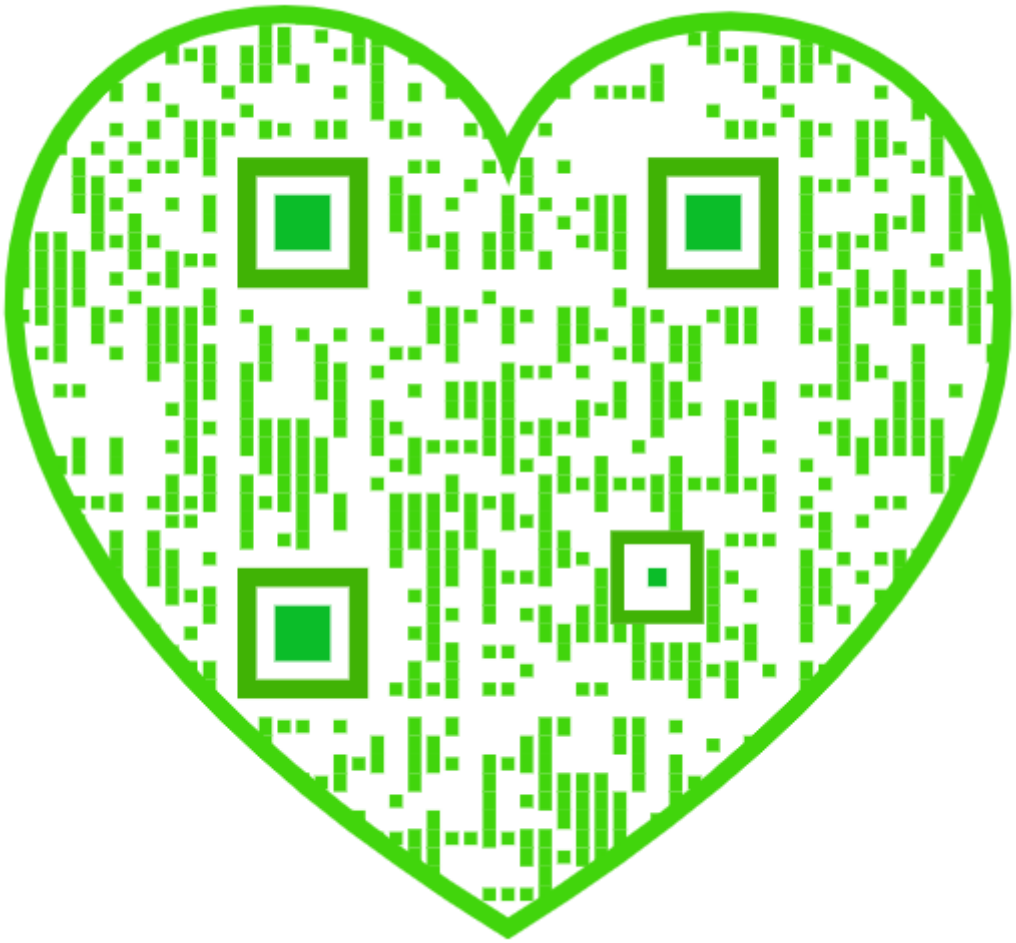

BANKING AND FINANCE

The textbooks listed on this page form the basic material for the LaSalle course in Banking and Finance. They cover in a systematic and organized way the field of practical banking, investments, and higher finance.

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PRACTICAL BANKING

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PREFACE

The purpose of this book is to explain the fundamental principles which underlie Practical Banking work in such a manner that they may be helpful to both students and bankers. In undertaking this task the author is fully aware that only a portion of banking can be learned by means of a textbook, and that actual work in a bank is requisite for anyone who would become expert in the business.

Banking practice has a technique of its own. There are certain fundamental reasons which govern the essential operations of a bank. These practices and reasons may be deduced from an analytical study of the experiences and methods of others. It is possible for a person fortified with such basic knowledge to acquire worthwhile experience in the higher branches of banking much faster and to perform his own work better than without such well-organized knowledge.

In the study of banking practice, it is well to avoid too voluminous detail, which only tends to confuse the reader. Throughout this book no attempt has been made to describe those phases of practical banking which, as a rule, can be mastered only by actual experience. A painstaking effort has been made to eliminate all unnecessary references and elaboration of detail and to treat each subject along the lines of elemental principles involved.

Certain phases of banking have become so highly specialized as to warrant the publishing of textbooks devoted exclusively to such branches of the business, as,

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for example, the functions of trust companies, extension of credits, foreign exchange, investment securities, and other similar ramifications of the general subject. Those higher specializations should, however, rest upon a broad knowledge of all banking.

A part of the text matter in Chapter XVI has appeared previously as an address by Raymond C. Cox, vice president of the Webster & Atlas National Bank, Boston. The author assisted Mr. Cox in the preparation of his address, and the part used in Chapter XVI consists largely of the matter supplied by the author at that time. Portions of other chapters have appeared previously in financial magazines and a book on elementary banking published in 1915. Some of the forms shown appeared originally in a book of banking forms also published by the author.

O. H. W.

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PRACTICAL BANKING

CHAPTER I

ORGANIZATION AND ADMINISTRATION

Until a very recent period, banking in the United States has been looked upon rather as a business or trade than as a scientific profession. Indeed, it has not been so many years, comparatively speaking, since the banker was regarded with some suspicion, if not actual dishonor.

The organization of a bank in the early days of the Republic was always a matter of political difficulty and was accomplished in the face of invariable public opposition. In 1784 a note of warning was sounded by a newspaper opposing the organization of a bank in New York City, which has since rounded out over a century of honorable usefulness. The newspaper writer expressed the fear that unless something were done to prevent it, "we will have one of these dangerous institutions not only in every state, but in every county of each state."

So eminent a man as Andrew Jackson, twice president of the United States, believed that the tendency of banks was to make the rich richer and the poor poorer.

Theory and Practice

It is not to be wondered at, therefore, that the scientific side of banking has been slow to develop in America; and even yet there is a disposition in some circles

to discredit knowledge of the subject gained through study as mere "theory." Theory may be either correct theory or incorrect theory, yet a proposition or the man who advances it, is often stigmatized as being "theoretical" without any particular discrimination as to just which variety of theory is meant.

In the application of the terms theory and practice to banking, no man can be said to be a practical banker who is not well grounded in the fundamental theories of his profession, whether he has gained this knowledge through study or experience. The same idea applies to every phase of the subject, whether it be bank history or bank accounting, foreign exchange or the functions of deposit and discount. Perhaps the so-called "practical" banker should be taken to be one who understands the nature of the daily transactions incidental to banking functions, and if this be a true characterization, as we may rightly consider it, then a *trained* practical banker should be able to put into operation, or supervise, any and every kind of transaction including all accounting records pertaining thereto. In short, he should be an economist, a business man, and an accountant all in one.

While actual experience in the operation and administration of a bank is essential to success in the business, a much more rapid rate of progress can be attained by a study of the theory of practical, everyday banking and its problems. This is true, because when the essential functions of banking are analyzed into fundamental elements, they will be found to be very similar in all banking institutions.

Distinctions between Banks

In the study of bank accounting from its practical side, no distinction need be made between the various

kinds or classes of banks to be found in this country. In principle, all forms of bank accounting are identical, just as the same system of bookkeeping may be used by either a brewery or a religious publication. Nor is there any reason to distinguish between large and small institutions in the matters of administration, operation, or accounting. It may be easier to understand the detail of an accounting system in a small country bank than in a large city institution, but this is merely because it would be possible in the first case to place all the books and records within sight and reach, whereas in the latter instance, subdivision requires the use of hundreds of forms, which seem more complicated than is actually the case.

There is a certain individuality peculiar to every banking institution that may distinguish it from other banks of the same class, yet the difference is apparent rather than real. After making due allowance for these peculiarities, which are in the main caused by the differences in the business habits and training of the officers who conduct them, all banks are essentially the same. A moment's reflection will indicate why this must be so. All handle the same money, the same general kinds of negotiable paper, and all are organized for the same broad purpose—the extension of credit. Viewed from a legal point of view, or from the standpoint of specialized service, banks do differ widely; but from the inside, all banking transactions can be reduced to common terms. A well-trained clerk or accountant, after a wide experience in one bank, can adapt himself in a few days to practically every other.

Since banks must be organized before they may be operated, it would seem logical that we should first give some attention to the accounting and other forms incidental to the organization of a new bank. This is only relatively true, however, since banks are seldom, if ever,

started by anyone not having complete practical banking experience. Further, the law is very specific on this point, and final instruction in the organization of a new bank is to be had from the proper state or federal authorities rather than from a textbook. While each state has its own banking code, each differing from the other in detail, it is unnecessary for general purposes to study each individual exception to established customs and methods. The National Bank Act of 1863 and the Federal Reserve Act of 1913 have served to unify state banking laws in all important respects, and therefore the methods of organization and administration of a national bank thus provided for by law may be accepted in general as typical of all American banking institutions.

Classes or Kinds of Banks

Banking classified according to functions and their lines of development is of three kinds:

1. Commercial.
2. Fiduciary.
3. Savings.

In some sections, especially in the large cities of the East, the distinction between them is marked. We find commercial banks, which are national, state, or private; trust companies, which are usually state institutions, although the Federal Reserve Act gives fiduciary powers to national banks subject to restriction; and savings banks, which may be either stock companies or mutual associations. In the smaller cities it is obviously impractical that there should be separate institutions organized to perform each of these three kinds of banking service; hence we find a single bank organized for commercial purposes and accepting savings in a separate department equipped to handle this class of business. Local trusts are often cared for by lawyers or other indi-

viduals, and it should be noted in this connection that the development of the trust company has not been from the commercial bank to the trust company, but from the individual trustee to the corporate trustee.

Such differences as exist in the accounting methods and transactions of purely savings banks and the trust departments of trust companies are treated in a separate chapter. The term "practical banking" refers to commercial banking, and the accounting methods of this great group of banks are universally the same whether large or small, city or country, national, state, or private.

Internal Divisions

The internal work of a bank may be classified into three kinds or divisions based upon the kinds of work involved:

1. Executive.
2. Teller.
3. Bookkeeping.

This is true whether the bank employs two men or two hundred. If it should be a safe proposition (which on account of the nature of the business it is not) for one man to own and operate a bank himself, he would find his time given up to three kinds of duties. He would need to give thought to the conduct of his business, to inquire into local trade conditions, to seek customers, to scrutinize their character and fitness to receive loans, to plan each day's routine and prepare for its needs. This is executive work.

He would meet his customers and depositors at the window, receiving and paying out money, accepting payment for loans and giving them general advice, instruction, and service with reference to their collections and other banking needs. When employed thus our banker is a teller.

At the close of business and during the day he would record upon his journals, ledgers, and registers the various transactions as they are undertaken or completed, figuring his profits and his debit or credit relation with his customers. This is bookkeeping.

In a three-man bank, the first is the cashier, the second is the teller, and the third is the bookkeeper. No matter how large the bank may grow to be, these three divisions are readily traceable, and by keeping them fixed in his mind the reader may find it easier to comprehend the more intricate details of what may appear to be a very complicated accounting system.

Department Organization

Departments begin to appear after the bank increases sufficiently to require the services of say a dozen employees. When there were but three men, they found it convenient to relieve one another during lunch hour, or they worked interchangeably. There is, however, one exception. The cashier, or "executive," never gives over his authority or responsibility, and this remains so in the very largest banks. The officers are charged by law, as well as by the requirements of ordinary business prudence, with the conduct of the bank's affairs and the investment of its funds. As soon as the business of the bank grows, it becomes necessary in the interest of efficiency to assign one or more men to one class of work exclusively. Such a group of three or more clerks is designated as a "particular department," which is nothing more than the work of one man divided up and apportioned among several. Thus it will be found that departments in a bank may be classified into the three groups previously mentioned. How these departments develop and what their duties consist of may be briefly described.

Executive Duties

In beginning with the executive division it should be noted that there is no limit save that of actual requirement in the number of officers a bank may have. The National Bank Act provides that a national bank must have a president and a cashier. But there may be any number of vice presidents and assistant cashiers. One large New York bank has seventeen of the latter and twelve of the former. These officers will divide the executive work among them. Many of them may specialize along particular lines, or they may be given charge over certain important departments, as, for example, the foreign exchange, credit, and transit departments.

A large Chicago bank has organized its official staff into groups consisting of a vice president and one or more assistant cashiers in each. One group specializes in looking after the bank's customers who deal in grain; another has charge of the cattle industry; another of the hardware trade, and so on.

In the small country bank a customer will present himself to the cashier and ask for a loan. The cashier will, ordinarily, be not only well acquainted with the applicant for credit, but will also know something about his customer's business. The visitor is probably a near neighbor, a member of the same church, and the cashier himself deals with him at his store or place of business. The cashier may call up the president of the bank by telephone for a brief consultation, and if the asked-for accommodation is granted, he will figure the amount of the discount and make all the records incidental to the loan.

In a large bank this familiar dealing with all the borrowers of the institution is out of the question; hence we find departments organized to relieve the executive offi-

cers of the necessity of carrying an impossible array of facts and statistics in their heads and still other departments to take care of the detail clerical work involved. Note, however, that the same underlying principles are included. The credit department has on file a complete record of the business standing and financial condition of the borrower; the analysis or statistical department will furnish data showing the value of the account to the bank and what has been the average balance carried, together with other details. If the loan is approved, the loan department figures the discount and makes all necessary records for the use of tellers and bookkeepers. There may also be a collateral department, whose duty it is to record and care for stocks, bonds, and other collateral left as security for loans. It is evident, therefore, that the credit, loan, collateral, and statistical departments are all organized for the purpose of relieving the executive officers of the bank of the detail work in connection with their duties.

The Tellers

Similarly, the teller's work will be split up into departments as the bank increases in size and volume of transactions. The first step is to install two tellers, one to receive—the receiving teller, and one to pay—the paying teller. These two in turn subdivide their work into further departmental organization. Allied with the receiving teller is the transit department, which assorts and accounts for checks payable outside the city. The customers of a single-teller bank deposit their collection items with him to be credited to their accounts when paid. They will also pay the teller for notes due the bank. In large banks there is a collection teller and a note teller, each in charge of his own department. The paying teller does not, as a rule, subdivide his work with auxiliary departments. In very large reserve city banks,

however, the work of preparing packages of currency for shipment, assorting and banding the various denominations of notes, and wrapping coins may be assigned to certain groups of clerks or subtellers.

It is one of the duties of both paying and receiving tellers to pass on the genuineness and goodness of all checks on the bank, either cashed or deposited. Signatures must be verified, indorsements examined, and overdrafts guarded against. This work is often assigned to a check teller, who examines and accounts for all checks drawn on the bank before they are given over to the bookkeepers.

A few large banks have adopted what is known as the "single-teller system." Instead of having a receiving teller with several assistants, and a paying teller in charge of a single large department, there will be several tellers, each of whom both pays and receives, confining his work, however, to limited groups of depositors alphabetically divided. When this system is used, it is precisely as if there were ten or more small banks operating under one roof, each with its own depositors and customers. The advantages of this plan will be described more fully when we take up the accounting systems used by tellers.

Bookkeeping

In the bookkeeping division of bank work, departmental organization is somewhat limited. The bookkeepers are given alphabetical groups of accounts to handle, the splits being arranged according to the number of depositors and the capacity of the bookkeepers. Each man is doing the same kind of work as his neighbors, but each is in charge of his own ledger. The two main groups of bookkeepers are the individual bookkeepers, who keep the accounts of the depositors, and the general ledger bookkeepers, who operate the general

or control accounts of the bank which appear on the bank's statement of condition. If the statement system is used to balance depositors' accounts, this work will be in charge of a separate department. In large city banks which have deposit accounts of other banks, such accounts are generally handled in a department known as the "general books" or "country books" department.

Special Departments

Other departments may be mentioned, some of which belong to one of the three main groups, but for the greater part they are organized for special purposes and services. For example, foreign exchange, safety deposit vaults, income tax, new business and advertising, purchasing, and other departments may be mentioned. A trust company might be described as a bank having a trust department. This department is of primary importance in institutions of that class and is itself divided into subdepartments. A better understanding of all departments will be had as the accounting work of each is described.

In summing up, it may be said that the work of a department is the work of one man in a small bank, divided among several in a large bank. All work within any bank belongs to one of three main divisions or classifications: executive, teller, or bookkeeper.

TEST QUESTIONS

1. Can a practical banker ignore the theory of banking?
2. Name and describe the kinds of banks and the duties of each.
3. What are the inherent internal divisions of work that result from the bank's duties?
4. What are some of the special departments of a bank?
5. What do you understand by the single-teller system?

CHAPTER II

BANK ACCOUNTING

The liabilities of a bank consist of its debts to the stockholders or owners, to the customers or depositors, and to the holders of its obligations, who may be the general public. To meet these liabilities, the banks must hold, or have claim upon, an equal amount of assets or resources. For convenience, these may also be grouped into three classes: (1) cash in the vaults; (2) balances due by other banks payable on demand; and (3) loans and investments represented by the money the bank has loaned, either through loans and discounts, or through bonds and securities purchased.

The statement of the bank consists, therefore, of two sets of figures: (1) the resources, representing the assets of the bank under proper descriptive classifications; and (2) the liabilities, setting forth in detail the creditors to whom these assets ultimately belong. Every transaction incidental to the operation of banking functions affects either the resources or the liabilities or both, and it is the purpose of bank accounting to record accurately and permanently each such transaction in its proper place.

The Statement of Condition

The semipublic nature of the banking business requires that an official statement shall be published at not too infrequent intervals. The National Bank Act provides that national banks shall issue statements at least five times annually. In addition to such publica-

tion, nearly all banks use their statements in their advertisements, especially if the figures presented reflect size and strength. Particular emphasis is often laid upon the item of deposits, and if there has been a steady growth of these funds, a comparative list covering a period of years may be shown. The intention is to impress upon prospective customers the idea that deposits have been attracted to the institution by superior services and facilities.

As a matter of fact, however, the condensed statement of condition published as an advertisement is of little real value in forming an estimate of the bank's true position. The relation between the capital and deposits, the amount of surplus, the proportion of liquid assets to liabilities, the rate of increase in earnings, and many other similar considerations determine in a large measure the real condition of the bank. The average individual is untrained in such matters and must rely largely on the safeguards thrown about him by constituted state and federal authorities. These will be treated in the chapter on "Audits and Examinations."

The Comptroller's Form of Statement

When the Comptroller of the Currency issues his call for a statement of condition, he provides the form in which classification of accounts must be made. It is important, for instance, to know the particular kinds of loans and investments the bank has made. Demand loans are quick assets as compared with discounted paper which may not mature before ninety days. Amounts due from other banks representing reserve, as for example, funds on deposit with the federal reserve bank, differ in availability from amounts due from banks not reserve agents. These latter sums usually represent checks in process of collection which may or may not be

paid. The cash on hand must be classified as to kind and, to some extent, as to the denominations.

On the liability side, the greatest division is in deposits. It must be set forth whether they are in the form of demand deposits subject to check, or whether they are time deposits. National banks must also classify their deposits with respect to ownership, that is, make separate returns for individual deposits and deposits of other banks. This brief explanation of the statement of condition is necessary because the books and accounting systems employed by banks are devised to meet the requirements of official classification of accounts.

Books and Records

The accounts shown on the statement of condition are known as the "control accounts." As has been said, every transaction, however minute and unimportant in itself, affects one or more control accounts. In accordance with the fundamental principle of accounting, for every debit there must be a corresponding credit and vice versa. It would be manifestly impossible to enter all transactions directly on the statement of condition. There might be thousands of daily debits and credits against the deposits, for instance, which would, in a large measure, offset each other, so that at the end of the day the item "individual deposits" would be increased or decreased by the net result of the checks drawn and money deposited.

But instead of operating a general ledger upon which only final results are to be posted, let us imagine an enormous sheet large enough to accommodate the detail record of every transaction. On the resource side let us suppose the loans and discounts, instead of being carried as one amount, to be listed in detail as to each borrower and the amount due by him. On the other side, instead

of capital stock, we would have the name of each stockholder and the number of his shares. Instead of total deposits, there would be an alphabetical list of all depositors, showing the balance due each. On such a sheet we might imagine officers, tellers, bookkeepers, and clerks crawling up and down like so many flies, pens in hand, making debit and credit entries. This is not impossible, absurd as it sounds; but it is entirely impractical and unnecessary, although it is exactly what happens in principle. All books and records are a part of the general ledger in which is kept the daily record of the final result of each day's transactions and their effect upon the bank's statement.

Accounting may be done upon slips of paper, loose leaves, cards, or bound books, but no matter how the records are made, bank accounting requires the use of four different kinds of books—using the word in a broad sense to include loose leaves as well. These are:

1. Journals.
2. Ledgers.
3. Ticklers.
4. Registers.

Bank clerks commonly give these books nicknames, as, for instance, the "black book," the "long book," the "yellow sheet," etc., which may be convenient ways to identify registers or journals used by different departments.

The journal is the book or sheet of original entry of a cash transaction. It is the "daybook," the word being derived from the French "jour," meaning day.

The ledger is a book in which balances are carried, and it is the totals of the various balances which are carried to the statement of condition. The sum of all the balances due depositors, for example, is the amount of "deposits" shown on the statement of condition.

Ticklers are also known as "scratchers" or "blotters." Entries are made in these books in cases where there may be a transaction involved which does not permit the bookkeeper to make his journal entry directly from the check, charge ticket, letter of advice, or other original evidence of the transaction. For example, in lieu of a draft a telegram may be sent by Bank A to Bank B directing Bank B to credit Bank C with a sum of money, charging the amount to the account of Bank A. A charge ticket will thereupon be filled out by Bank B charging the account of Bank A. A teller's assistant will post the amount with proper explanation on the tickler, and the bookkeeper will credit the account of Bank C, the tickler entry being his authority and also providing a check against the credit in his final settlement for the day.

Registers may be either books or loose slips adapted to carbon duplication. These books are used, not to record completed transactions, but to set down descriptive records which are referred to later, either for information or for further disposition. For example, the bond register will describe in detail the essential facts in connection with the bonds owned by a bank. Such information would consist of the price paid for the bond, from whom purchased, name of the issue, maturity date, rate of interest, etc. Upon the collection register would be noted the name of the owner of a bill of exchange or note deposited for collection, place payable, amount, whether protestable or not, when due, etc.

Registers often are in loose-leaf form, with duplicate copies secured through use of carbon paper. This method permits the use of the original entry as a charge ticket or credit slip in the final disposition of the item of which the register is otherwise merely a record. Registers and other blank forms are kept in stock by large stationery and office supply firms.

Accounting Systems

All accounting records made by banks are interlocking. The work of one clerk or department is purposely so arranged as to serve as a check or verification of the work of a different clerk or department. Not only is this a convenience in the matter of locating errors and differences, but it also serves to prevent fraud and dishonesty. Bank accounting systems are good or bad as they accomplish these two ends without at the same time making duplication of work necessary.

There are two contingencies which constantly threaten accuracy and honesty and against which no system yet devised seems to be absolutely proof. They are the innocent contra-error on the one hand, and the dishonest collusion between two or more clerks on the other. For example, accounting must ordinarily be assumed to have been correctly done, if settlement is made. Let us suppose, however, that there has been an error in addition of one thousand dollars in totaling the cash items held by the teller. On the same day, the bookkeeper may have mistaken a figure on a check and posted an item as three thousand dollars which should have been two thousand. Both sides of the statement will be equal because the two errors have equalized each other, and it may be that several days will pass before either error, on being discovered, makes it necessary to find the contra-error.

Well-trained clerks always draw a pencilmark through a "blind" figure or amount and rewrite the figures plainly beneath the original. Careless depositors are responsible for an endless amount of annoying and unnecessary labor due to poor penmanship in drawing checks and making deposit tickets. In some instances a teller could himself make up the deposit for a particularly careless or ignorant customer.

Locating "Differences"

The test of accuracy in accounting is the settlement or proof at the end of the day's work. It is a fair statement that all banks, especially the larger ones, could reduce the number of their employees at least 10 per cent could errors be entirely eliminated. But so long as this state of perfection is humanly impossible, it is necessary to devise systems that will, to a certain extent, automatically locate differences; or if this first check fails, then there should be care taken that errors will be confined within definite limits. Systems that accomplish this purpose are known as "block" systems.

Experience teaches that the amount of the difference often serves as a clue which will assist in locating it. For instance, if the amount be one dollar, ten dollars, or a hundred dollars, or any other similar amount, the odds are in favor of an error in addition. If the amount is divisible by nine, the clerks will look for a transposition, that is, the reversal of two figures—45 for 54, 2,627 for 2,672, etc. A difference of $74.25 will almost invariably prove to be an amount of $75 taken as 75 cents, or vice versa. When all the usual tests fail in the case of a difference of any proportions, the accounting genius of the department will make hasty calculations as to what juggling of figures on a check could result in the proper combination to produce the amount of the difference, as for instance, $2,171.16 posted as $217.16.

Adding Machines

Methods of accounting in all lines of business, and especially banks, have undergone important changes since the introduction of adding machines. Mechanical devices have reduced clerical labor to such an extent that nearly all modern systems are built around the

machines. While this has a tendency to reduce the individual proficiency of the clerk as an accountant, it increases his efficiency tremendously as to output. Banks, therefore, regulate their internal systems so as to make as full use as possible of listing, adding, and bookkeeping machines. The original machines merely listed and added amounts. The first important improvement was the duplex machine, which "carries figures in its head," so to speak, listing amounts and showing totals of particular groups, giving a final recapitulated total of all the subtotals in one operation. The next step was the bookkeeping machine, which will "pick up" a balance, add the deposits, subtract the checks, and "throw out" the new balance. The combination typewriter and adder is another valuable labor-saver. Without adding machines, banks to-day would be virtually helpless.

Books v. Loose-Leaf Systems

Cards and loose-leaf systems are preferred to bound books and are used by all except the most conservative and "old-fashioned" institutions. Such records can readily be separated into sections; this enables two or more men to work independently at the same desk or to assist one another without interference. They may be used more conveniently when it is desirable to transfer accounts from them to adding machines for the purpose of proof. Another advantage is that blank or "dead" sheets can be eliminated from current transactions.

Loose-leaf systems are more easily manipulated by the dishonest than books, and usually require greater checking safeguards. However, it is safe to say that those with criminal tendencies who occasionally operate against banks from within would do so whether or not

there would be the added incentive of such systems. Properly used and controlled, they are as safe as any other set of records. There must always be the element of risk in banking, which even the best accounting systems cannot eliminate. Certain it is that the many undeniable advantages of loose-leaf records far outweigh the minor disadvantages, which at the most are matters of opinion rather than of fact.

The use of colors plays an important part in bank accounting. This is true of both ink and stationery. It is a universal custom to show overdrafts in red ink, which avoids the necessity of an extra ledger column for this purpose. In compiling credit department or analysis records an amount shown in red ink is intended to reflect an unsafe or unsatisfactory condition. Charge or credit tickets are pink, white, or blue to denote the particular teller or department through which they are to be handled.

Carbon sheets are well adapted to many uses where duplicate or triplicate records must be made of a single transaction. This is especially true of collection and transit work. Rubber stamps for use with an inked pad can be adapted for various uses when there is not sufficient need to require a printed form, but where much writing may be saved. In summing up, it may be said that banking offers an unlimited field for ingenuity in reducing clerical work and other fixed expenses. Banks interchange ideas, and scarcely a day goes by but that some improvement is made in one feature or another.

Accounting as Related to Bank Functions

Before examining the technical details of bank accounting, it might be well to consider briefly the various functions of banks which give rise to the transactions of which records and accounts are made. What these transactions signify may be defined as "theory";

how and in what form the records are made may be defined as "banking practice."

The three principal functions of banks are as follows:

1. Deposit.
2. Discount.
3. Issue.

Incidental functions are of infinite variety, as, for example, dealing in bonds; foreign exchange; collection of negotiable paper, such as checks, drafts, notes, and bills of exchange; safe-keeping of securities and other valuables; acting in a fiduciary capacity and performing many other financial and commercial services, all of which have been characterized as the "by-products" of banking. There is one phase of banking so important and giving rise to so large a part of bank accounting as to warrant particular treatment here. This development is known as the "deposit-and-check" method of making payment, through which the use of money as a medium of exchange is to a very large extent obviated.

Methods of Payment

Assuming that the reader is possessed of a working knowledge of fundamental economics—the processes of production, distribution, consumption, and exchange—we may eliminate a general discussion of money—what it is, how it is used, and the part it plays in exchange—and proceed with a brief explanation of the most scientific and advanced method of making payment made possible by modern banking facilities. There are four ways in which exchange or payment for goods and services may be effected, although we are so accustomed to speak in term of dollars and cents that the idea prevails of but one method of settlement, that is, with money. As a matter of fact and particular interest in a study of bank accounting, there is a more convenient and satis-

factory process well known to modern economists and in daily operation, although scarcely appreciated.

In the chronological order of their development, the four ways of making payment are:

1. Barter, or the exchange of goods for goods.
2. The use of a common medium of exchange, money, into which the value of goods is converted and the money then exchanged for other goods.
3. The opening of book accounts between two parties, the cancellation of one debt against another, and the settlement of the difference in money.
4. The accumulation of all credits in one place, the bank, and the use of credit instruments, usually checks, to meet all debts to whomsoever they may be owing.

The development of this plan is reflected in the monetary statistics of the United States, where we have about four billions in all of money, the medium of exchange, and more than twenty billions of dollars of bank deposits or credits. To the untrained layman this is a curious condition which causes him some anxiety, as he wonders what would happen if all bank depositors should want their "money," with less than a quarter enough to go round. He does not reflect that depositors want money—not that they may consume it, but that they may use it to purchase goods or make payments. Through banking facilities they make these payments by transferring their bank credits or deposits from one to the other without a dollar of currency changing hands.

It is this function of banking that causes at least 75 per cent of all bank accounting, and while an important part of the records grow out of the creation of the credits through loans and other operations, it is with the exchange or transfer of credits that bank accounting is chiefly concerned. This fact is well shown in any

large commercial bank. For instance, in an institution employing one hundred and fifty clerks, bookkeepers, and tellers, four or five men can easily handle all the books and records used in connection with the loans and discounts.

Accounting Expenses

Another interesting feature in connection with bank accounting is that the incidental functions of banks give rise to the greatest amount of labor and expense. Interest upon loans and investments is the bank's chief source of income, although the clerical work involved in the making of loans and discounts is in very small proportion compared with the tremendous outlay of time, labor, and overhead expense met with in providing services which will attract depositors. Thus it happens that the bank, viewed as a workshop or countinghouse, may present a picture of extreme industry not in any way related to the earning power of the bank's resources. Between 75 per cent and 90 per cent of the accounting work of a commercial bank grows out of the services which the bank renders its depositors, the bank rarely receiving any fee by way of payment, but looking to the income derived from the deposit for reimbursement and profit.

Closely related to the deposit-and-check service which the banks render their depositors, is the collection of notes, drafts, bills of exchange, coupons, etc., which, in banking parlance, are usually referred to by the generic term "collections," as distinguished from checks and bank drafts which are "cash." Collection items consist of negotiable paper having a fixed date of maturity, as, for example, promissory notes, or paper payable by individuals rather than by banks, such as sight and time drafts. These items are accepted by banks with the understanding that they will be credited to the

account of the depositor upon payment. In theory checks or "cash items" are also subject to the same conditions in that the bank retains the right to reverse the original credit should a check be returned unpaid. By giving the depositor immediate credit, the great majority of checks being paid on presentation, the bank is able to handle checks in bulk, that is, by total amounts.

In the case of notes, drafts, etc., each item must be treated separately, since credit is given only when proceeds have been received. Furthermore, notes and drafts are evidences of debt, rather than means of payment, and the maker of the promissory note or the drawee of a sight draft usually pays or "takes up" these instruments with his checks. Many large business houses draw sight drafts at monthly intervals upon their customers, which drafts are then given to banks to make collection. Unfortunately, such items are, as a rule, nothing more than duns, and many banks are beginning to refuse to handle them unless they are allowed a fee for each item whether paid or not.

The bank check and the items deposited with a bank "for collection" constitute two of the most trying problems which modern banks must consider. The bank derives no direct benefit from either; it assumes a material risk; and, as has been stated, there is no relation whatever between the vast amount of accounting the bank must do because of their use and the income earned upon the resources. The problem of the check is of sufficient importance to warrant special consideration in a separate chapter.

The collection item may be used as an illustration of another interesting feature of bank work, which is that an increase of work in most departments is by multiplication rather than by addition. A sight draft left with a bank for collection is first entered "short" in the pass book; or, if many of these items are deposited, the

customer will be furnished with a special pass book in which the amount and place payable of each item are listed by the depositor and initialed by the teller as an acknowledgment of receipt. The draft is first entered upon the collection register, the record consisting of date deposited, owner or depositor, drawee, place payable, when due, to whom forwarded, amount, and whether or not it is to be protested in the event of non-payment. The item is then indorsed and listed upon a letter addressed to the bank's correspondent in or near the town where it is payable. An envelope must be addressed in which the draft is then inclosed with the letter and forwarded. If returns are not made promptly, a tracer is sent out. If, however, the drawee pays the draft upon presentment, the bank receives notice of payment. The account of the depositor is then credited, and he is given due notice. If it should be returned unpaid, it is sent to the depositor and crossed off his pass book.

In all, there have been at least six separate operations necessary for the proper disposition of each item. Now if instead of one item, a hundred are deposited, it can readily be seen that the accounting work increases, not by one hundred, but by six hundred.

TEST QUESTIONS

1. What is a statement of condition?
2. What are the four big divisions of bank accounting?
3. What are some of the methods of locating differences?
4. What can be said in favor of the bound-book system? Is it preferable to the loose-leaf system?
5. What are the functions of a bank? Has the function of "issue" been fully developed in this country?
6. When the bank is a collecting agent does it make any difference in the work entailed whether or not credit has been *at once* given to a customer?

CHAPTER III

THE RECEIVING TELLER

Commercial banks are institutions whose functions are deposit, discount, and issue. It is logical, therefore, to begin the study of departmental accounting with those transactions which are involved in connection with the deposit of funds. There are two other reasons why this plan is best and easiest for the student. In the first place, the bulk of all the day's work has its inception at the receiving teller's window. "Putting an item through the work" is a shop phrase in the ordinary bank, and this putting-through process usually begins in the receiving teller's department or cage. It is a curious anomaly, however, that the paying teller is the "first teller" and the receiving teller is the "second teller." They are often so designated on the bank's internal records.

The second reason for starting bank accounting with the receiving teller is that this teller begins the day with a clean sheet. Every day is a new day for him, precisely as if the bank had just opened its doors for the first time. Indeed, in many banks, especially in the larger cities, a part of the second teller's accounting begins outside his window.

Let us step out into the lobby and watch a depositor as he makes up his deposit ticket. He will find desks and counters conveniently arranged about the open space or lobby, and so placed as to permit him to stand as he arranges his deposit. Preferably these desks or counters are made of heavy, clear glass, so that if a

check or banknote falls to the floor, it is easily discovered. Pens and ink are at hand, and blotters, calendars, and other necessary stationery are in proper place.

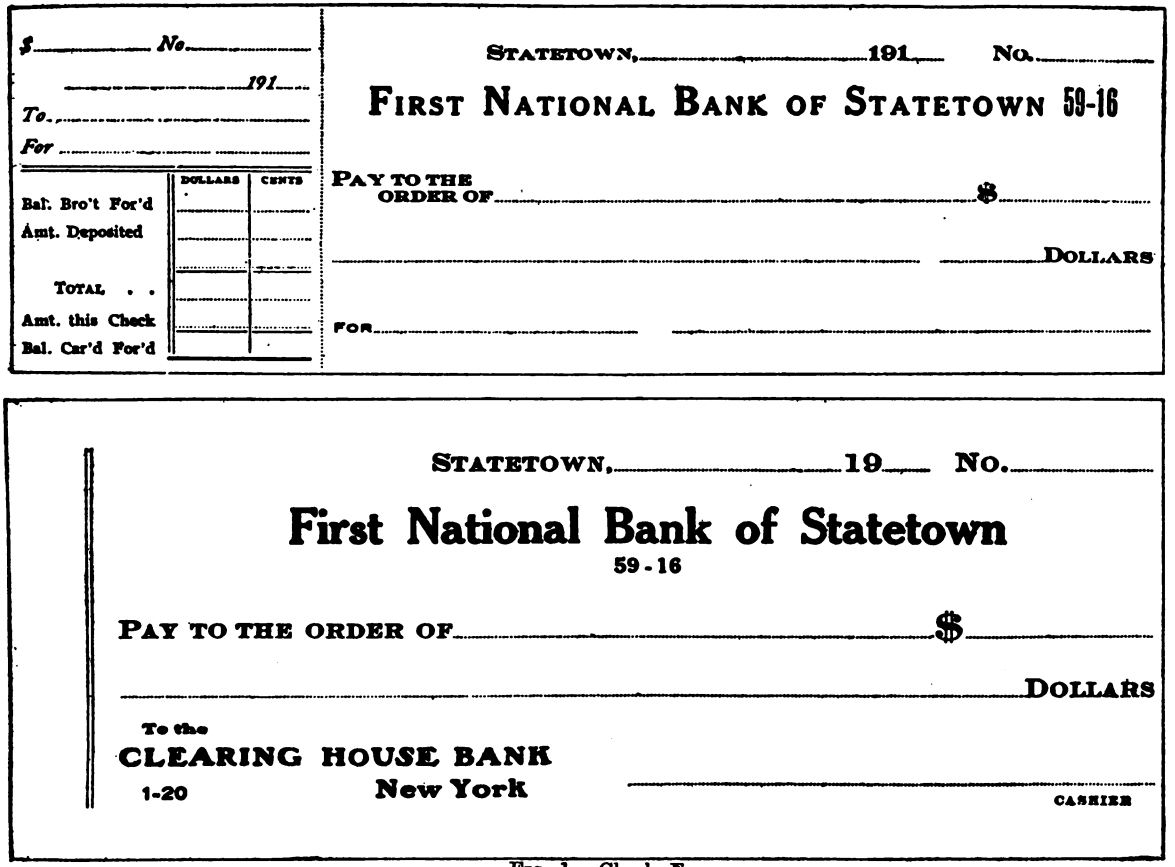
Make-up of the Deposit Ticket

The form of the deposit ticket will bear examination, for it is here that the well-conducted bank takes the first step toward facilitating the ready disposition of the various items that make up the average deposit. This will consist of gold, silver, small change, paper money of various denominations, and checks. We need not here or elsewhere distinguish between checks and bank drafts, which are merely the checks of one bank drawn upon another. So far as accounting is concerned, all "bills of exchange drawn upon a bank and payable on demand" (Negotiable Instruments Act definition of check) are "cash items" and are subject to the same accounting processes.

Checks do differ materially, however, with respect to the place payable. Generally speaking, they are of four kinds:

1. Those drawn on the bank in which they are deposited, which may be termed "self-checks."
2. Those drawn on local banks, members of the clearing house, known as "clearing-house checks."
3. Those drawn on nonclearing local banks, called "runner's items."
4. Those payable outside the city, called "transit checks."

All these various kinds of money and checks must go through different channels in their accounting journey within the bank. It follows, then, that a vast amount of assorting and assembling can be accomplished by the depositor himself, although he may not be fully aware of the reasons why he is asked to make up his deposit



$_____ No. _____

_____ 191____

To _____

For _____

	DOLLARS	CENTS
Bal. Bro't For'd		
Amt. Deposited		
TOTAL . .		
Amt. this Check		
Bal. Car'd For'd		

STATETOWN, _____ 191__ No. _____

FIRST NATIONAL BANK OF STATETOWN 59-16

PAY TO THE ORDER OF _____ $_____

_____ DOLLARS

FOR _____ _____

STATETOWN, _____ 19__ No. _____

First National Bank of Statetown

59 - 16

PAY TO THE ORDER OF _____ $_____

_____ DOLLARS

To the

CLEARING HOUSE BANK

1-20 New York

_____ CASHIER

FIG. 1.—Check Forms

in a certain way. The extent to which he thus coöperates unconsciously varies considerably in different parts of the country. Usually all the banks in one city or general section follow the same methods; rarely is there a variation to be found between two banks in one community.

All kinds of deposit tickets may be divided roughly into two groups: (1) those upon which the depositor is asked to write in the "place payable"; and (2) those upon which he enters the amounts only with no further

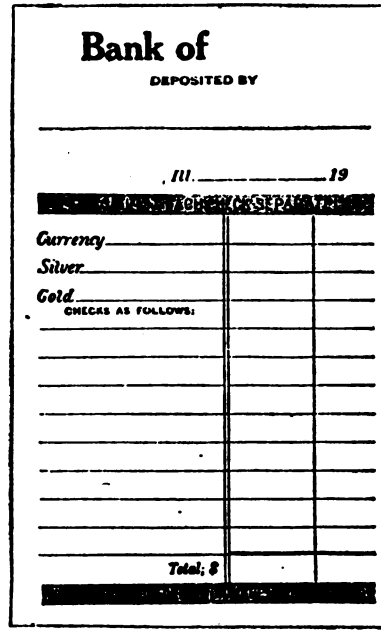


FIG. 2.—Deposit Ticket
Simple form requiring no description of deposits.

description. The latter are in the great majority, but the former are so well adapted to quick and efficient systems of handling the checks after they are deposited, that it is singular more banks do not seek to "educate" their customers into using this method. How the cus-

tomers themselves would benefit will be seen later. Typical varieties of deposit tickets are shown in Figures 2, 3, and 4 with proper explanation of their distinguishing features.

When the deposit is all entered upon the slip or ticket with the footing carefully added up, it is presented at

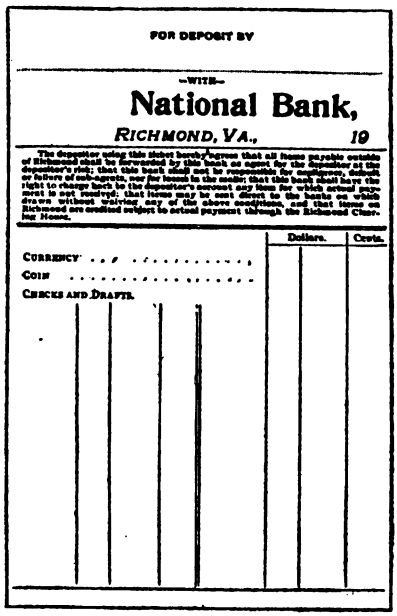
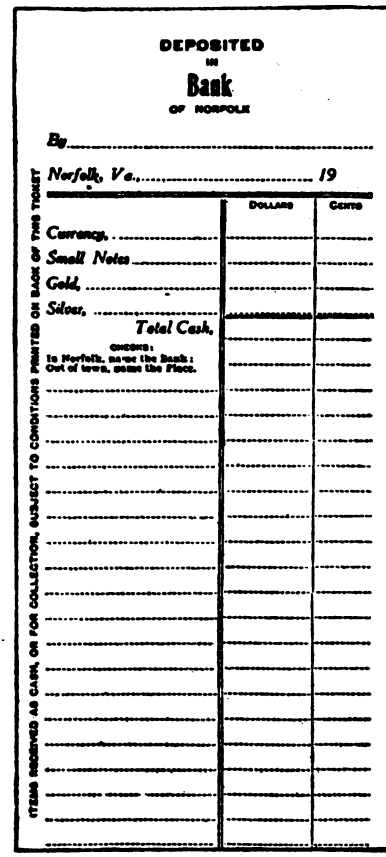


FIG. 3.—Deposit Ticket
Stating terms upon which the deposit is accepted.

the teller's window. Sometimes a further preliminary advantage is accomplished by banks having great numbers of depositors in providing separate windows for alphabetical groups—A to G, H to N, etc. Since the ticket is used by the bookkeepers as an original entry in posting credits on their ledgers, the purpose of this classification is obvious. The teller first satisfies himself that the deposit is intended for his bank by a hasty glance at the pass book. He must also be on guard at all times against unintentional error or actual fraud in

making deposits to the wrong account. Agents and other individuals have been known to make deposits to their personal accounts which should have been put to the credit of their employers.


DEPOSITED
IN
Bank
OF NORFOLK

By .....

Norfolk, Va., ... 19

ITEMS RECEIVED AS CASH, OR FOR COLLECTION, SUBJECT TO CONDITIONS PRINTED ON BACK OF THIS TICKET

	DOLLARS	CENTS
Currency,		
Small Notes		
Gold,		
Silver,		
Total Cash,		
CHECKS:		
In Norfolk, name the Bank:		
Out of town, name the Place.		

FIG. 4.—Deposit Ticket
Requiring a description of checks deposited.

TESTING THE DEPOSIT

Technically, or perhaps we should say in theory, the teller then examines the cash as to the kind, amount, and absence of counterfeits. Next he will check back

the items on the ticket to see that they are properly listed and added. He then sees that the checks are indorsed by the payee, usually the depositor, that the checks are not postdated, etc.; and if all is in order, the amount of the deposit is entered in the pass book with the date and initial of the teller. As a matter of practice, however, except in small banks or large banks not receiving very bulky deposits, the teller merely satisfies himself that the checks are indorsed by the depositor, after which he enters the amount in the pass book as a receipt. If he should take the time to check the accuracy of every entry on the ticket and count and examine all the currency, etc., it would result in a long line of impatient customers. It may be presumed that the depositors are honest and businesslike; else their accounts would not have been accepted by the officers of the bank. This being true, a better method of proving the ticket, described in detail later, is possible, and mistakes, if any, can be rectified and the depositor notified by telephone. Entries in the pass book can be changed, if necessary, when the next deposit is made. If the depositor designates the "place payable" opposite the amounts of checks deposited, still further delay at the window is avoided, since otherwise the teller will need to write in the names or make some mark of identification.

Relation to Other Departments

To get a proper understanding of the accounting records of the receiving teller, we must first note the relation this teller bears to the other departments of the bank. He is the feeder and principal distributing agent to each of the clerks or groups of clerks who must examine, assort, and record the various items which make up the deposit. The deposits, as we have seen,

consist of cash and four kinds of checks, classified as to place payable.

In receiving these checks on deposit the bank undertakes, as agent, to make collection, that is, to convert the proceeds of each check into cash as quickly and as economically as possible. The interests of the bank and the depositors are mutual in this respect, check deposits being of no avail to either until they are converted into funds that may be withdrawn by the depositor or loaned by the bank. Placed in order as to the time and simplicity of accounting in which this process of conversion may be accomplished, self-checks come first, then clearing-house items, various city or runner's items, and transit checks. These last are expensive to handle in proportion to the distance of the paying bank from the bank receiving the deposit.

The "Batch System"

It will be seen at once that there must be as little delay as possible between the moment the deposits are made and the time they are placed in the hands of the different departments which make the internal records. The most efficient accounting system yet devised for the receiving teller is the so-called "batch" or "block" system. This system is in use in practically all modern banks of any importance. It is so elastic, however, that unless the basic principles are understood, it is easy to fall into the error of imagining a different system is being employed in almost every bank. The main advantages of the batch system are that none of the time and calculations necessary to the proof of the deposit ticket is lost and that there is no delay to the depositor nor to the clerks who take the items from the teller.

As soon as the deposit is receipted for in the pass book, the currency and notes are separated from the

checks. The amount of the money is listed on two small slips, one of which is handed with the currency to an assistant, who verifies it, at the same time placing all of one kind together and keeping a sharp watch against counterfeits. Should there be an error, a number placed on the slip corresponding to a similar number on the deposit ticket enables the clerk to identify the depositor who made the mistake in his count. He is then notified by telephone that the total of his deposit has been corrected and that the proper entry will be made in his pass book the following day or when the next deposit is made. Meanwhile, another clerk has assorted the checks contained in the deposit into the four divisions as to the place of payment.

A sheet is provided with columns ruled for each group of items. The sheet is then placed in an adding machine which is automatically "spaced" to accommodate the different columns. The items are "run up" on the machine, a separate total being struck for each batch of checks. The totals are then recapitulated, including the amount of the currency, which is copied from the ticket. The grand total must agree with the total of the deposit ticket. When the proof is thus accomplished, the name of the depositor is written opposite the amount. Several deposits containing a few items each may be grouped together on one sheet to save time and stationery. Thus the proof sheets take the place of a deposit tickler.

Thus far the process has been described as one devised to prove the correctness of the depositor's figures as to both listing and addition. In accomplishing this, the use of the batch system provides a method of checking up the work of the departments, which then receive the checks for further accounting. The self-checks go to the bookkeepers to be "posted" against the accounts of the drawers; the various city items go to the messengers or

DEPOSITS						
	TRANSIT DEPARTMENT				[illegible] DEPARTMENT	
	NEW ENGLAND AND NEW YORK	PENN'A	SOUTH EAST AND MIDDLE WEST	EXTREME SOUTH AND WEST	VARIOUS CITY	CLEARING HOUSE
	ON US	CASH	EXCHANGE	RECAPITULATION	DEPOSITS	DEPOSITORS

Items of one or several depositors are assorted into the various divisions named on the sheet and then written on the adding machine. The recapitulation proves the tickets. The names of the depositors are written opposite the amounts of deposit, such record becoming the "Deposit Tickler".

At the end of the day the various sheets are recapitulated on one sheet, mail totals are added as well as receipts from other departments, the transfer sheet totals are added and subtracted and the result is the final proof with the work so divided that each department makes a separate settlement.

FIG. 5.—Distribution Sheet

runners to be presented at the counters of the nonclearing banks; the clearing-house checks go to the "rack" or clearing-house clerks who assort them in the envelopes of the clearing-house member banks; the transit items go to the transit department to be assorted geographically and prepared for transmission to correspondent banks. At the end of the day each of these departments will receive a total amount from the teller, consisting of the accumulated totals of all the deposit proof-sheet columns which have been recapitulated on a single sheet. Thus it will be seen that none of the time or figures used in proving the accuracy of the deposit tickets has been wasted, since these figures enable the other departments of the bank to check the accuracy of their own work. See Figure 5 for a description of the distribution sheet.

There are further advantages in the batch system. In nearly all banks except the smallest, the ledgers are divided alphabetically into two or more books or groups of accounts. By making the same classification of the deposit tickets on the proof sheets, the teller is able to give each bookkeeper the correct total of all his own deposit tickets, the purpose of which plan will be better understood when we come to the study of the bookkeeper's duties.

Furthermore, by increasing the number of columns on the proof sheets, extensive division can be made of the checks when necessary. The larger the volume of checks handled by any one group of clerks, the greater are the chances of error, which means that if an error is made by a section consisting of ten men, all of them are losing time looking for an error that may be anywhere in a thousand or more entries, whereas if a division is made on the proving sheets, the error is restricted to five hundred entries, which may hold only five men at the end of the day. The batch system is, therefore, an ideal one

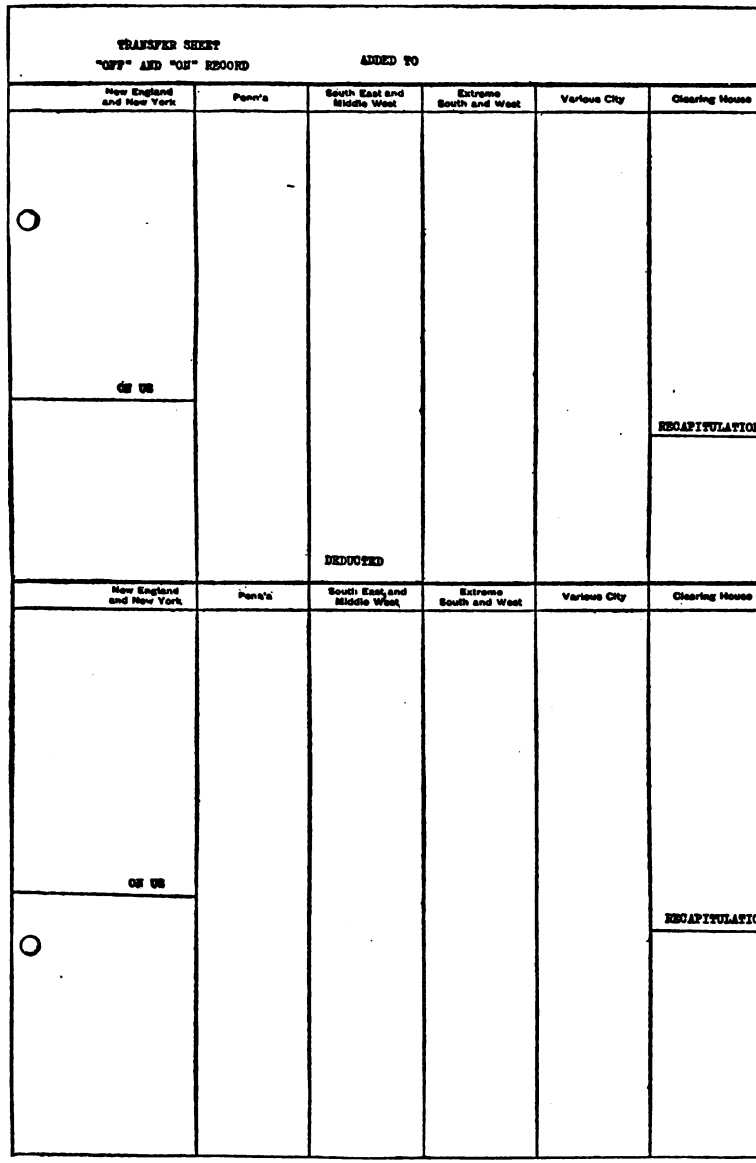


FIG. 6.—Transfer Sheet Used for Missorts—Batch System

to secure elasticity in dividing the work properly among a number of clerks who are thus able to enjoy the benefit of their own speed and accuracy, or, on the other hand, suffer the penalty of carelessness without inflicting an injustice on their more accurate fellows.

An important part of the batch system is the transfer or "off-and-on" sheet. If missorts are made, that is, if a clearing-house item is inadvertently charged to the transit department, the original entry is not altered, but instead the amount of the check is listed on the "off" side of the sheet under the heading "transit checks" and is added on the "on" side under "clearing house." These transferred amounts are then added and subtracted at the end of the day. (See Figure 6.)

Receiving Teller's Settlement

In a small bank employing up to ten men, no particular advantage is to be derived in making accounting divisions of the receiving teller's items. The entire "bank" makes one settlement at the end of the day, which includes the teller's items and general transactions. The principles involved are the same, however, in each case. The teller is charged with all the items he has received during the day, and his settlement consists in accounting for every penny at the close of the day's work. If this teller acts as the "clearing house" of the bank, in addition to receiving checks and cash from the depositors, he will also receive the receipts for notes paid to the note teller, or cash paid to the draft teller for bank drafts sold to customers, or checks on other banks cashed by the paying teller, etc. He will add all his receipts together each properly classified as to the source, and against this total he must have an amount made up by cash on hand, plus the checks he has charged to the bookkeepers and other departments. Not

all credits to depositors' accounts are deposits such as have been described. When loans are made to customers either upon their own notes or through discounted bills, the credit memoranda may be made directly from the

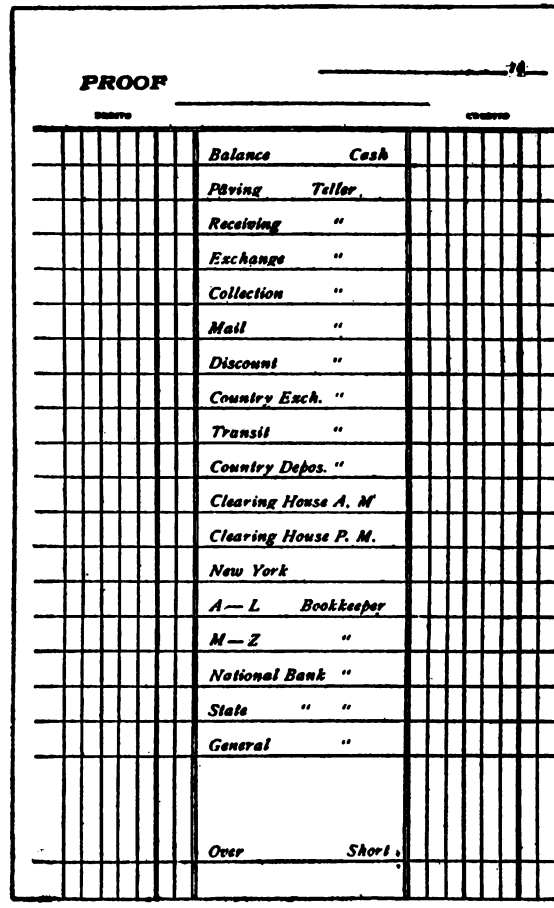


FIG. 7.—Teller's Settlement Form

loan clerk to the bookkeepers, but as an added check against the loan department, such credits are often recorded through the receiving teller to the bookkeepers.

TEST QUESTIONS

1. Describe briefly the duties of the receiving teller.
2. Why does a deposit ticket properly made up expedite the teller's work?
3. What is meant by the batch system?
4. Is an original entry altered if a missort is made in the use of the batch system?
5. Describe briefly the receiving teller's settlement.

CHAPTER IV

THE PAYING TELLER

It is a common habit among those who associate the term with the employee who handles the "cash" in a theater, restaurant, or other public place, to speak of the paying teller of a bank as the "cashier." In view of this careless use of the word, it is well to call attention here to the fact that the cashier is the executive officer, although in very small institutions he may also act occasionally as paying teller.

The duties of the paying teller are exactly the reverse of those of the receiving teller. Though his accounting is less complicated and more easily understood by the layman, the responsibilities resting upon the paying teller are by far the greater. The receiving teller may accept counterfeit money or worthless checks or he may make other errors, but at least he is in possession of evidence that enables the bank to recover from the depositor. The paying teller, on the other hand, pays out, and it is extremely difficult to establish the fact that he has overpaid a particular person or to apprehend anyone who may have received payment of a check of which—it may afterward be disclosed—he was not the bona fide holder. In other words, the receiving teller's transactions are limited almost entirely to customers of the bank as they make deposits, whereas the paying teller cashes or pays checks to thousands of people who have been given checks on his bank, but with whom the bank may have no other business relations.

General Duties

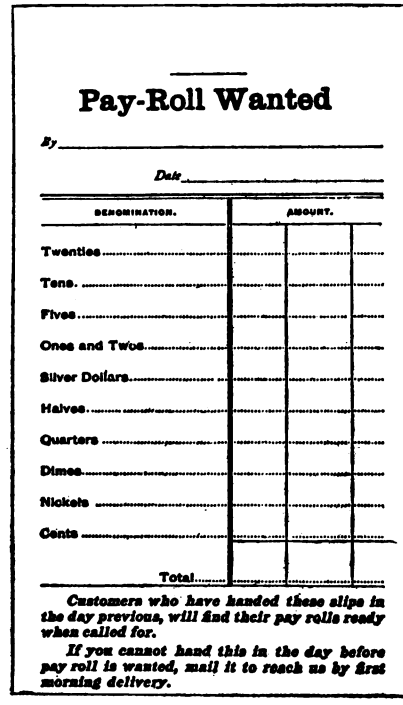
The general duties of the paying teller are:

1. The payment of money to the depositors for their personal use or for pay-roll purposes.
2. The cashing of checks which have been given by depositors to their creditors, who, having no bank accounts wherein they may deposit for their own credit, present them for payment.
3. The shipment of currency to out-of-town depositors or bank correspondents.
4. The certification of checks.

Experience determines what proportion of its deposits a bank may expect will be withdrawn across the paying teller's window. This is the principle underlying reserve provisions in banking legislation. A bank is theoretically solvent only so long as it is able to pay out cash to those who are entitled to demand it. Obviously, if the institution should invest or loan all the funds of its depositors, it would be unable to do this, and although the trained banker may be depended upon to have a sufficient margin of cash in his vaults to meet ordinary demands, the law does not leave the matter entirely to his judgment. A certain percentage of the deposits, varying with the class of bank, must be kept constantly in hand in the form of lawful money. In passing, it may be noted that bank reserve is concerned with another important economic consideration which will be referred to in a later chapter.

The paying teller must further see to it that the money over which he has custody is in proper proportions as to denominations so that he can meet any reasonable demand for fives, tens, twenties, or silver and gold, as the case may be. There will be special demands on pay days, etc. A pay-roll requisition indicating the

amount of each denomination is used by the customer in withdrawing the necessary sum of money. (See Figure 8.)



Pay-Roll Wanted

By _____

Date _____

DENOMINATION.	AMOUNT.		
Twenties			
Tens			
Fives			
Ones and Twos			
Silver Dollars			
Halves			
Quarters			
Dimes			
Nickels			
Cents			
Total			

Customers who have handed these slips in the day previous, will find their pay rolls ready when called for.

If you cannot hand this in the day before pay roll is wanted, mail it to reach us by first morning delivery.

FIG. 8.—Pay-Roll Request Form

RESPONSIBILITIES

The paying teller is charged with the responsibility, resting upon the bank, of knowing the signature of the depositor and of being certain that the money is paid to the proper payee. He must further know whether the check is "good," that is, whether or not the depositor has sufficient balance to meet the amount called for. He must also be sure that there is no "stop payment" order on file applying to the check presented for payment. An efficient teller must keep all these matters in his mind

constantly. He cannot stop to examine the signature file and the ledger before paying each check. On a busy Saturday morning a constant stream of customers passes before his window. Not only must the teller be on his guard against the contingencies suggested above, but he must also be able to count large sums of money rapidly without mistake.

Nor is the strain thus put upon him merely mental and physical. Having in his possession and under his control thousands and even millions of dollars of actual money, his moral fiber must be unquestioned. An incident will illustrate how scrupulous the paying teller must be even in small things. As a young man, the author was employed for a time in the paying teller's cage. A friend presented himself at the window to collect a small debt, payment of which would have required a trip to a distant part of the bank. In order to avoid delay, permission was asked of the teller to take the amount from the drawer and restore it immediately after the money had been secured from the private locker in which it had been placed. The answer of the veteran teller was simply to take out his own pocketbook and hand it without a word to the thoughtless clerk—a rebuke which had the proper effect.

Detail Work

After some years' experience, perhaps as a bookkeeper and receiving teller, the paying teller will have become so familiar with the signatures of depositors as to be able to identify them at a glance. So far as the goodness of the check is concerned, the great majority of depositors can be trusted not to overdraw. Those who draw too closely or in unusual amounts are the exception, and these can be memorized. In case of doubt the bookkeeper may be consulted by an assistant while the teller engages the customer in tactful conversation

to avoid any resentment. Tact is one of the teller's most needed qualifications. No one cares to be put in the position of having his credit questioned, least of all the man who is careless as to the relations between the checks he draws and the balance he carries with the bank. The matter of identification is nearly always exasperating to the payee, who is so well-known to himself as to find it impossible to understand why a check drawn to the order of John Smith, in his possession, does not prove conclusively that he is John Smith.

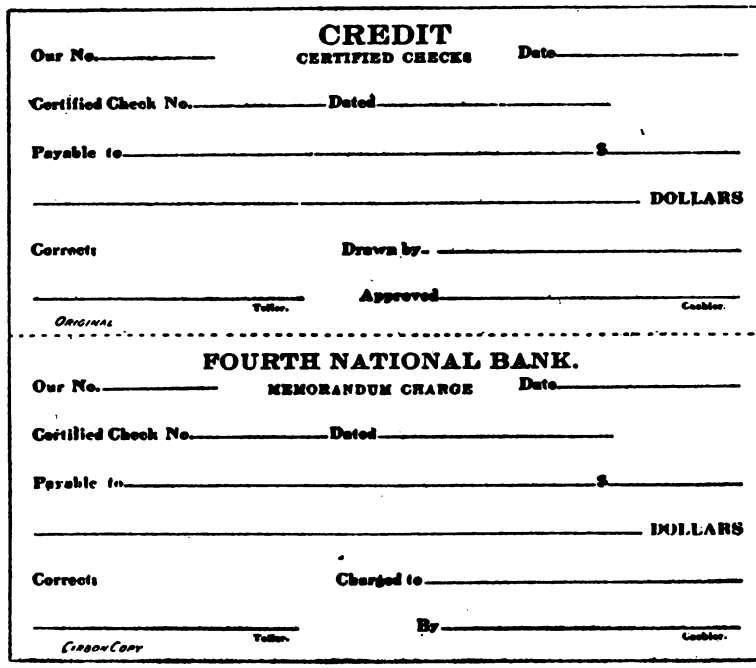


FIG. 9.—Certified Check Debit and Credit Forms

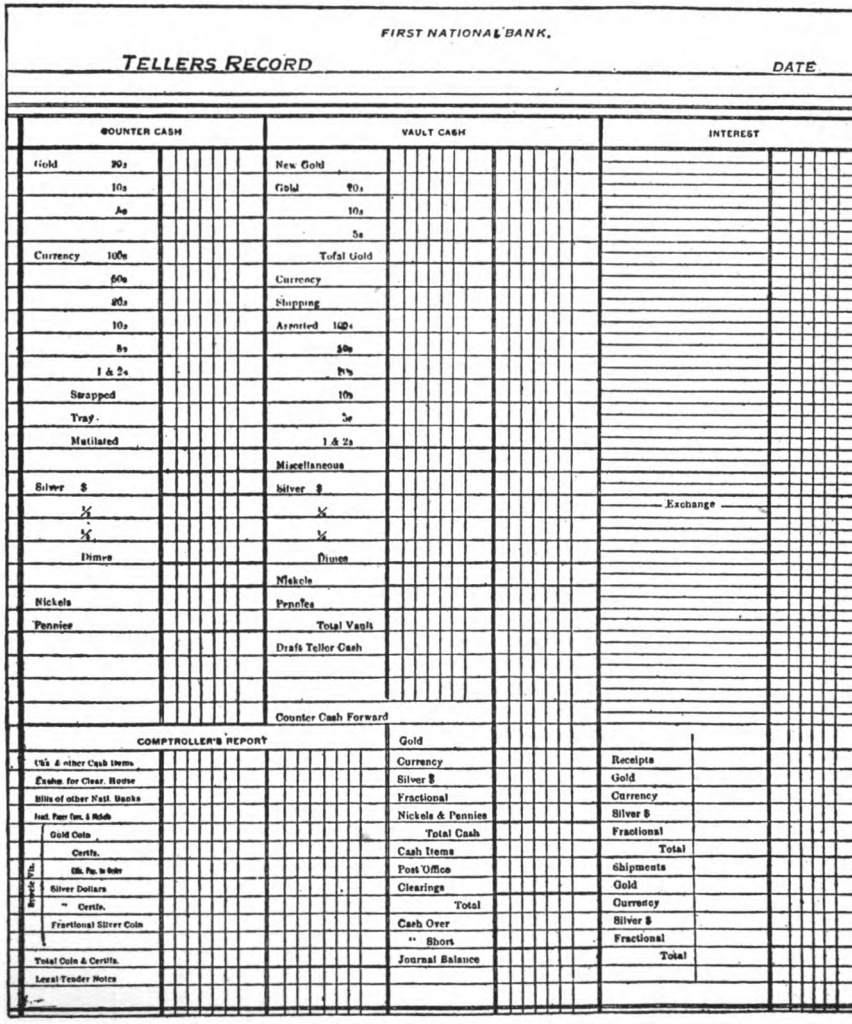
The certification of checks usually falls to the lot of the paying teller, although sometimes an officer looks after this work on account of its relative importance. Banks are forbidden by law to certify a check which

overdraws an account. Certification is equivalent to acceptance by the bank of the check of its depositor. When a check is certified, the account of the drawer is charged as if it were paid in money, and the bank, instead of the drawer of the check, becomes liable for the amount. If the payee has the check certified instead of accepting the cash, he is the loser in case the bank should fail before the check is presented for payment. If, however, the drawer should hand his certified check to the payee and the bank should fail before the payee has had time to present it, then he can sue the drawer for the amount. The depositor has the legal right to assume that the bank will not cash a check after the official closing hour (usually 3 P. M.), and the bank that pays out money or certifies a check after this hour does so at its peril. If a depositor issues an order to stop payment on a check he has drawn, he can recover from the bank if the check was presented and paid the day previous after closing hours.

In order to avoid error in his count while paying checks, the teller arranges his money in convenient amounts. Bills may be banded in $100, $500, or $1,000 packages. Notes of smaller denominations are "crossed" in $25 or $50 lots. Coin is stacked and placed in paper rolls or envelopes properly marked as to contents. Sometimes automatic "cashiers" are used. These machines have a keyboard, and by pressing the keys representing the amount of change wanted, the money falls into the hand or a receptacle placed to receive it.

Paying Teller's Settlement

The accounting details incidental to the paying teller's department are very simple. This teller deals with fewer books and records than other departments because he handles actual cash rather than debits and credits.



FIRST NATIONAL BANK.

TELLERS RECORD DATE

COUNTER CASH

Gold 20s
10s
5s
Currency 100s
50s
20s
10s
5s
1 & 2s
Strapped
Tray
Mutilated
Silver $
½
¼
Dimes
Nickels
Pennies
Counter Cash Forward

VAULT CASH

New Gold
Gold 20s
10s
5s
Total Gold
Currency
Shipping
Assorted 100s
50s
20s
10s
5s
1 & 2s
Miscellaneous
Silver $
½
¼
Dimes
Nickels
Pennies
Total Vault
Draft Teller Cash

INTEREST

Exchange

COMPTROLLER'S REPORT

Ckk & other Cash Items
Exchs. for Clear. House
Bills of other Nat'l. Banks
Ind. Fase Inc. & Rdmb
Gold Coin
Certfs.
Clk. Pg. to Order
Silver Dollars
" Certfs.
Fractional Silver Coin
Total Coin & Certfs.
Legal Tender Notes

Gold
Currency
Silver $
Fractional
Nickels & Pennies
Total Cash
Cash Items
Post Office
Clearings
Total
Cash Over
" Short
Journal Balance

Receipts
Gold
Currency
Silver $
Fractional
Total
Shipments
Gold
Currency
Silver $
Fractional
Total

Fig. 10.—Teller's Cash Settlement Form

He begins the day's work with a given amount of cash, which is listed on his records as to kind and denomination. Inasmuch as he will not pay out the entire amount of money he has during the day, he finds it convenient to keep a double record divided as to the money in the

PAYING TELLER'S SETTLEMENT SHEET

Cash on Hand (Last Settlement)							
Clearing House (First Mail)							
" " (Citizens Checks)							
" " (Receiving Teller)							
" " (Receiving Teller's Mail)							
General Ledger (Cashier's Checks)							
" " (U. S. Treasurer)							
Receiving Teller							
" "							
Note "							
" "							
Draft Clerk							
" "							
Cash Items (Last Settlement)							
				TOTAL RECEIPTS			
Charged to Individual Ledgers							
" " Foreign "							
" " General "							
" " Receiving Teller							
				BALANCE			
CASH ON HAND							
Gold Certificates							
" Coin							
Legal Tender Certificates							
" " Notes							
Silver Coin							
Subsidiary Coin							
National Bank Notes							
Silver Certificates							
CASH ITEMS		TOTAL CASH				(Over) (Short)	
Total Actual Cash on Hand							
Paying Teller							
Receiving Teller							
Note Teller							
To next Settlement							

FIG. 11.—Paying Teller's Statement

vault and the money in his cage. If he must replenish his "till money" during the course of the day, he will go to the vault, take what he needs, and reduce his vault cash by that amount.

By referring to the form, Figure 11, the nature of the teller's statement will be readily understood. Beginning the day with a known amount of cash, he must settle at night by showing an equal amount consisting of cash on hand and checks which he charges to the bookkeeper. His receipts consist of cash which the receiving teller has handed him either during or at the end of the day. If the receiving teller uses the block system of settlement, he is able to hand over his cash at intervals. Similarly, the paying teller gives to the bookkeepers the checks he has cashed in several lots or "courses," as they are called. If the teller "cashes" checks for customers of the bank, which are payable at other institutions, he charges such items to the receiving teller, who handles them in his settlement as if they had been deposited.

Single-Teller Systems

In small banks there will be a single teller, who both pays and receives. So far as accounting is concerned, the records are practically a consolidation of the paying and the receiving teller's settlements. As cash is deposited by some of the customers, it is counted, assorted, and banded together and is then paid out to others. The cash on hand in the morning, plus the receipts during the day, must be accounted for finally by an equal amount of cash, checks deposited, and checks cashed.

The single-teller system is also used in very large banks as a matter of convenience in serving a large

number of depositors. The tellers are allotted to alphabetical groups of customers, each window being labeled as to the division: A to G, H to M, etc. Behind each teller's cage is the individual ledger bookkeeper, who has the same accounts which are cared for by his particular teller. Thus it will be seen that the result is as if there were eight or ten small country banks operating under one roof, each doing business with its own group of customers. The advantages to the bank are that the tellers, becoming more easily familiar with the faces, signatures, and business habits of a limited number of depositors, are able to render better service and are less liable to make mistakes. Furthermore, since the tellers settle independently of each other, errors are more easily found. The depositors benefit by not having to stand in a single long line awaiting their turn at the window, and they are also able to transact most of their business at one time instead of going first to one teller and then another.

The Check Teller

Still another combination system is that in which a sort of intermediate teller is employed, known as the "check teller." While the duties of this clerk vary with each institution, in general he is charged with the work of examining and accounting for all "self-checks" deposited or paid. It may be noted here that when a bank receives a check on itself on deposit, it technically has paid the check and it is bound by the same rules of law as if the item had been actually cashed at the paying teller's window and the cash then deposited with the receiving teller. The check teller is to be found only in the larger city banks which receive the greater amount of their own checks through the mail and in clearing-

house exchanges. The check teller examines signatures and indorsements and then charges the items to the bookkeepers. The check teller does not come into direct contact with the public.

TEST QUESTIONS

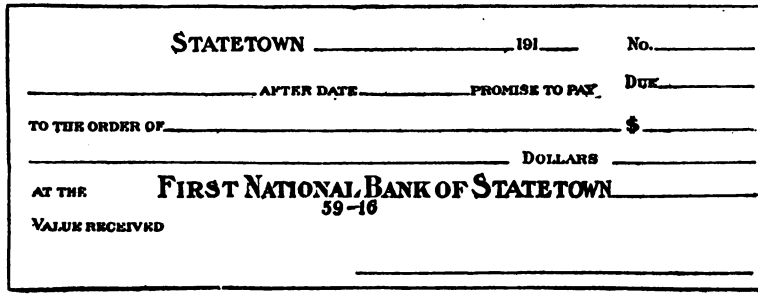
1. What are the general duties of the paying teller?
2. What is understood by the certification of a check? Does the responsibility for this action rest with the paying teller?
3. What are the general responsibilities of the paying teller?
4. Describe briefly the paying teller's settlement.
5. What is the single-teller system?
6. In what bank is the check teller found?

CHAPTER V

THE NOTE TELLER

The note teller, as distinguished from the other tellers, handles collection items only such as checks, notes, drafts, bonds, coupons, etc., which are deposited with the bank for collection and credit only after payment has been received. The greater part of this teller's transactions have to do with notes and drafts, but occasionally he will receive checks or other items which, for one reason or another, the bank will not accept as cash.

For example, a transient customer may present a check, payable in a distant town, which he wants collected. Having no regular account with the bank, he is not able to deposit the item; so he leaves it for collection, and the bank will pay him the money after returns have been received.


STATETOWN _____ 191__ No._____

_____ AFTER DATE _____ PROMISE TO PAY Due_____

TO THE ORDER OF _____ $_____

_____ DOLLARS _____

AT THE FIRST NATIONAL BANK OF STATETOWN _____

59-16

VALUE RECEIVED

_____

FIG. 12.—Promissory Note

As the term implies, the most important part of the note teller's work is the collection, presentation, and payment of notes. Not only do these items require

greater care and exactness in handling, but they must also be treated as individual items and not in totals, as checks are. The reasons are that they are payable by individuals and not by banks; they have a fixed time of maturity, and often they bear interest which is computed and added to the principal at the time of payment. Another important consideration is that notes, drafts, acceptances, and the like are bought and sold as investments, whereas checks are almost invariably received on deposit and handled by banks as agents.

Payment of Notes

In small banks a sign or placard is displayed at the receiving teller's window reading: "Pay Notes Here." Larger institutions assign a separate teller to this work. The note teller, as he is called, looks after the notes and time drafts which come into the possession of the bank for collection. They are of two varieties as to ownership: (1) those which have been left with the bank by city customers and out-of-town bank correspondents; and (2) those which the bank has bought or discounted.

$\$$_____

When due

_____

Number

_____

Montana, _____ 19____

_____ after date, for value received, we jointly and severally promise to pay to the order of _____

_____ Dollars

with interest thereon at _____ per cent. per month from date until paid, and with reasonable attorney's fees in addition to other court costs in case an action is instituted to enforce payment. Each of the makers hereof, and the endorsers hereon, waive demand, protest and notice of non-payment.

Payable at Office of

The National Bank

Montana

_____ P. O. _____

_____ P. O. _____

_____ P. O. _____

FIG. 13.—Promissory Note with Special Attorney's Fee and Waiver Clauses

The items owned by depositors are given to the note teller as soon as they are received by the bank, usually several days before the date of maturity. As they are

received, the teller enters them in his register, with a complete description, after which he files them in the order of their maturity. The bank's own items, which

When left at Bank	Payer	Where payable	When due		Amount		Remarks
			Month	Day			

Fig. 14.—Note Teller's Collection Register

.....

.....

Your note for $.....cts.....is due and payable at

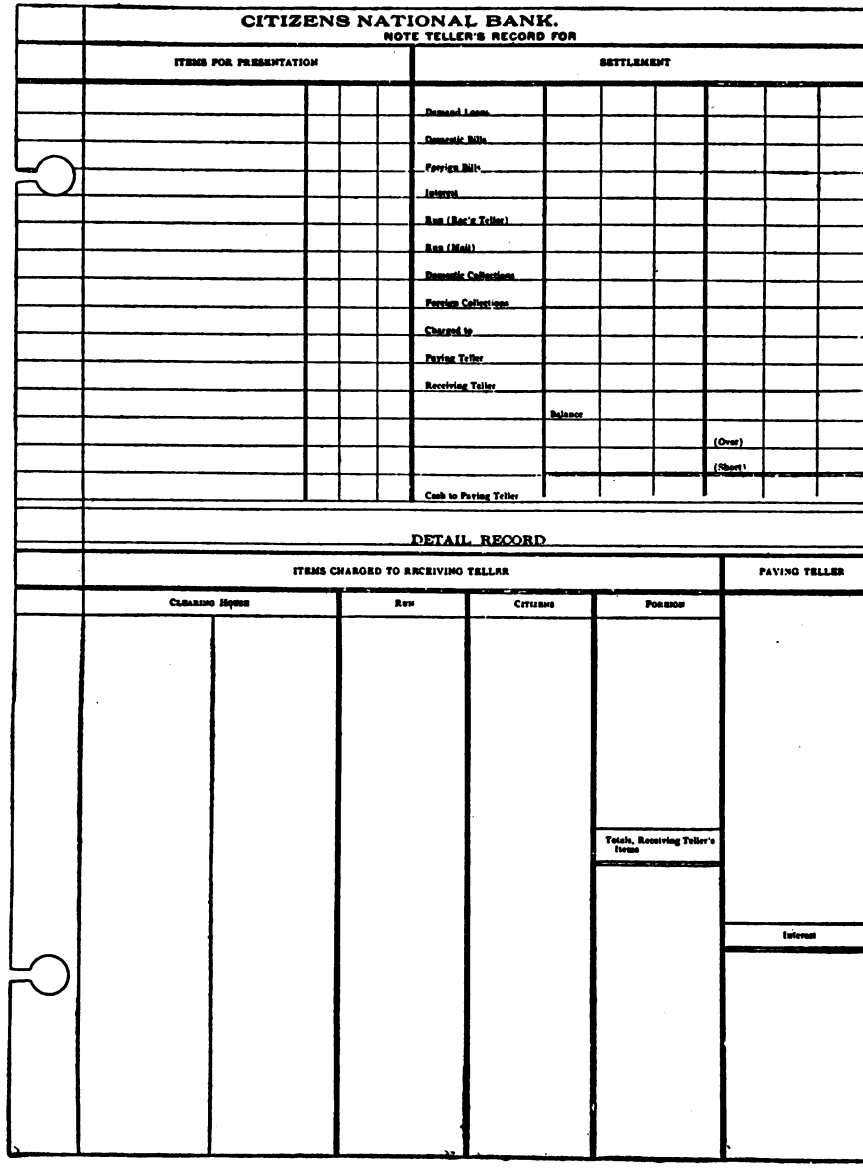
THE FIRST NATIONAL BANK

on.....

Bank closes Saturday at 12 o'clock noon. Notes maturing Saturday, Sunday, and Legal Holidays are payable the following business day.

NOTES MUST BE PAID IN MONEY OR BANK DUE BILL

Fig. 15.—Maturity Notice


CITIZENS NATIONAL BANK.
NOTE TELLER'S RECORD FOR

ITEMS FOR PRESENTATION

SETTLEMENT

Demand Loans
Domestic Bills
Foreign Bills
Interest
Run (Rec'r Teller)
Run (Mail)
Domestic Collections
Foreign Collections
Charged to
Paying Teller
Receiving Teller
Balance
(Over)
(Short)
Cash to Paying Teller

DETAIL RECORD

ITEMS CHARGED TO RECEIVING TELLER

PAYING TELLER

Clearing House
Run
Citizens
Foreign
Totals, Receiving Teller's Items
Interest

FIG. 16.—Note Teller's Record

have been discounted or bought, are generally held by the loan department in the bank's "portfolio" until the date of maturity, when they are placed in the hands of the note teller. In either event, a notice is mailed to the maker or acceptor some days prior to maturity, advising him that his note or acceptance of a certain amount is due on such a date and is payable at the office of the bank. The time of the banking hours, the address of the bank, and the kind of funds which will be accepted in payment are also noted. The law does not require this notice to be sent out, but this is invariably done and is a further illustration of the services a bank renders gratis to its depositors and customers. If the note is payable at a bank, it is treated as if it were a check and is presented at the counter of the bank named in the instrument, or it may be sent through the clearing house.

The teller lists the items payable each day on a sheet, which is ruled to accommodate the "satisfaction" or a description of the funds in which the maker makes payment. Only cash or certified checks are acceptable in payment of a note, although if the maker is well known to the bank and his credit is unquestioned, his check may be accepted. The reason is obvious. If a bank should accept a check in payment, delivering the note over to the maker, and it should later develop that the check was not good, the bank would be liable for the amount to the depositor or owner of the note and could only recover by suing the maker on the check.

At the end of the day, any items remaining unpaid are handed to a notary, who then makes presentation at the place of business of the maker, and if he refuses payment in cash, the item is then "protested," a legal process which binds all the indorsers and the maker by serving notice on them that the law has been complied

$\$$.....

Statetown,.....*19*.....

PLEASE TAKE NOTICE *that a*.....

signed drawn by.....

for.....*Dollars,*

dated.....*19* , *payable*.....*after date*

at the First National Bank of Statetown,.....

.....

and endorsed by you, was this day, presented and payment thereof demanded, but which being refused and the.....*remaining unpaid, it was this evening* **PROTESTED** *for non-payment, and the holders thereof look to you for payment of the same, together with interest, damages, costs, etc.*

Respectfully yours,

.....

Notary Public.

To.....

.....

Forward enclosed notices.

FIG. 17.—Notice of Protest

with in the matter of presentation and demand for payment. A form for protest is shown in Figure 17.

CITY COLLECTIONS

In addition to notes, the bank will receive many demand, sight, and time drafts, usually drawn upon merchants and tradesmen by their creditors. If the drawee is situated at a considerable distance from the bank, he will be written or telephoned that the bank holds a draft on him which he will please call and pay. The majority

of these items, however, are presented in person by the bank's representative, who is called a "runner" or messenger. If the drafts are time, that is, drawn "at three

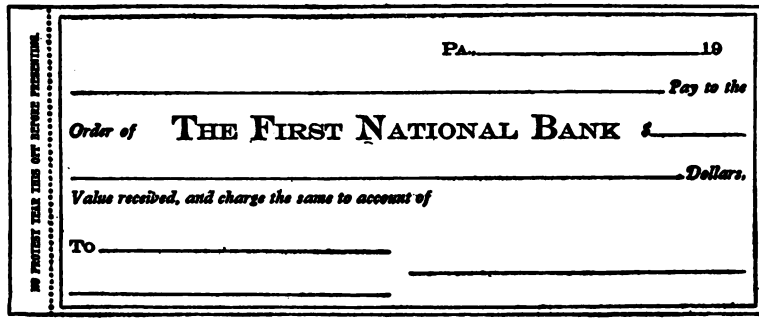

NO PROTEST MAY TAKE PLACE AFTER PRESENTATION.
PA. 19
Pay to the
Order of THE FIRST NATIONAL BANK $
Dollars.
Value received, and charge the same to account of
To

FIG. 18.—Form of Customer's Draft

days' sight" or "ten days after date," etc., they are presented for acceptance, and if acceptance is secured, they are returned to the note teller, who places them among his notes according to due dates. Figure 19 shows a form of a collection clerk's register.

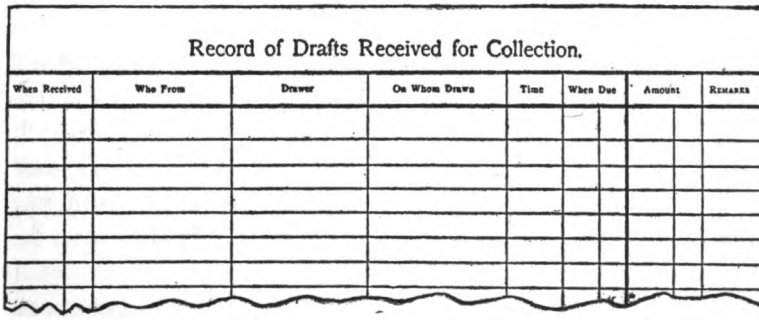


FIG. 19.—City Collection Clerk's Register

Drafts may be protested for nonacceptance. Many drafts have documents attached which are to be delivered to the drawees only upon payment, as, for instance, bills of lading. Here again the bank assumes the risk (and usually without a fee, it may be mentioned) if

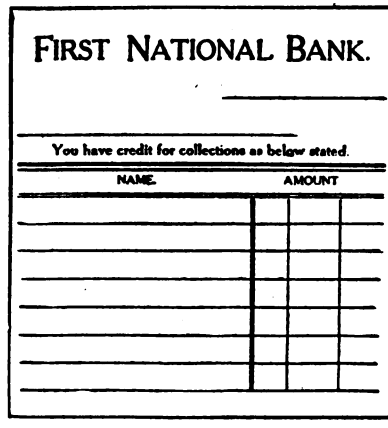
the messenger accepts a check instead of actual cash, delivering up the draft and accompanying documents (usually negotiable) to the drawee. A common form of draft is the "arrival draft," so called because it is payable on the arrival of goods for which the draft represents payment. In such cases the bank may depend upon information received from the drawee, who usually will notify the bank promptly, since he cannot get his goods from the railroad without the bill of lading attached to the draft which he first must pay. At times the bank will communicate with the railroad offices as to the arrival of shipments.

The runners or messenger's department is usually consolidated with the note teller's department, or it may be conducted separately, although many of the items handled by the runners go through the note teller's work. In a large city bank the head runner is a trusted and valuable employee. His duties are by no means to be confused with those of an ordinary messenger in other lines of business. He must know in a general way the credit standing of the "street," a word used to define the business personnel of a large city. In other words, he must be able to use good judgment in directing his assistants where they may leave a draft, which after inspection will be accounted for later in the day by the drawee; where they must not leave a document; where a check may be accepted; where cash must be secured, etc. Since the majority of the people with whom the runners come in contact are not customers of the bank, the risk involved is apparent. Furthermore, the runner must have a working knowledge, at least, of the Negotiable Instruments Act.

Note Teller's Settlement

The settlement of the note teller is simple. At the end of the day he will cross from his list all the notes

which remain unpaid. He then strikes a total of the items paid, and he must be able to show an equal amount of cash and checks. He may then turn over his entire receipts to the receiving teller, who adds them to his settlement; or he may distribute his returns himself, the cash to the paying teller, self-checks to the bookkeepers, and other items to the departments which handle them. Each individual runner makes a daily statement and settlement on a slip exactly in the same manner as the note teller; that is, he lists the items he takes upon the street for collection and accounts for his returns by designating the "satisfaction" opposite each item as he receives payment. All items paid are, at the end of the day, credited to the accounts of the depositors or correspondents who have sent them in for collection, and a credit advice slip is sent out. Unpaid items are


FIRST NATIONAL BANK.

You have credit for collections as below stated.

NAME.	AMOUNT		

FIG. 20.—Collection Credit Advice

returned, with or without protest, according to previous instructions.

OUT-OF-TOWN COLLECTIONS

Collection items payable out of town are not, as a rule, handled by the note teller, but since they consist

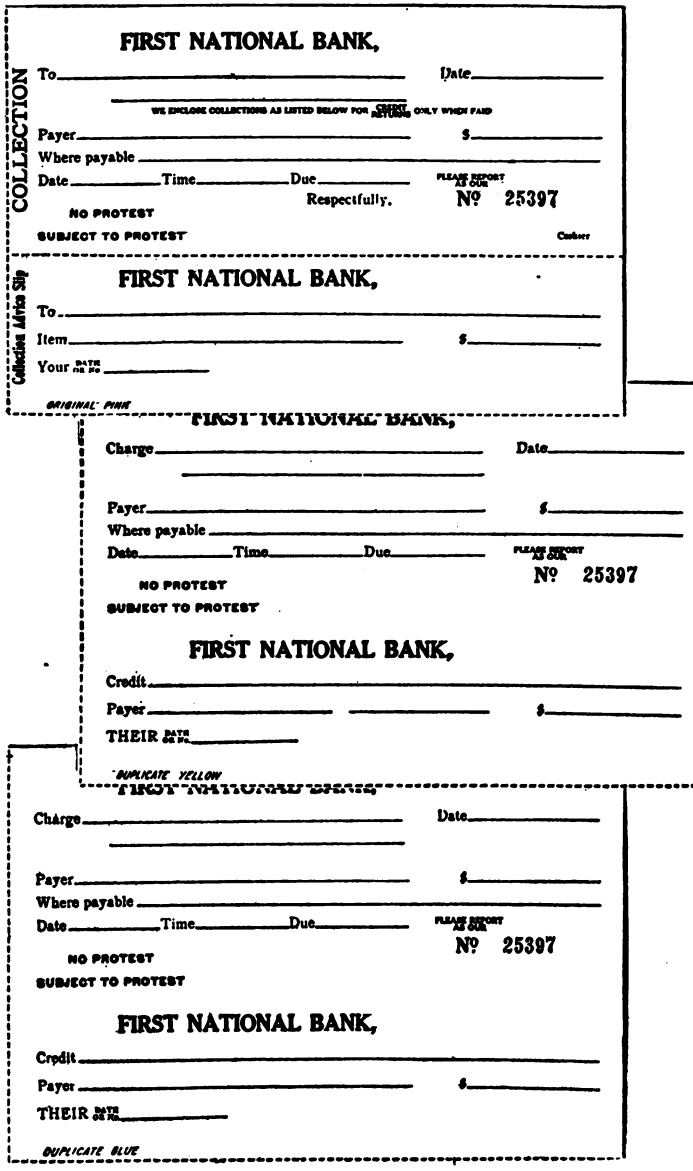


FIG. 21.—Loose-Leaf Carbon Collection Register

of the same class of transactions, a description of the methods used may be discussed here. The "collection teller" who handles out-of-town business which is credited only after payment, may have an independent department, or he may be a part of the transit department, which is described in the next chapter.

The principal record of the collection teller's department is the register. This record is not in book form as a rule, but consists of loose slips, one of which is used to describe each item. Generally a carbon record in duplicate, triplicate, or even quadruplicate is made. Forms for this purpose are shown in Figure 21. After the items have been "written up," they are sent out to the bank's correspondents for collection, a process which we have just previously discussed in connection with the note teller.

If prompt returns are not made, a "tracer" is sent out. (See Figure 22.) If the item is paid, the proper

PLEASE REPORT IMMEDIATELY BY MAIL ON THE FOLLOWING ITEMS.

FIG. 22.—Collection Tracer

slip is taken from the compartment in which it has been filed, together with the carbon duplicates. One of these is used as the charge ticket, charging the bank to whom the item was sent; another becomes the credit memo., from which the bookkeeper will make the credit entry to the owner or depositor's account. If a third slip has been made, it is properly stamped with the word "paid" and the date, and becomes the advice of pay-

ment sent to the owner. The charge and credit slips are later filed away as a permanent record of the transaction. In banking parlance, the word "fate" is used to designate the final disposition of the item.

Due Diligence

As has been pointed out, collection items require extreme care in the process of presentation and payment. The expression "due diligence" is a technical term defining what may legally be considered to be proper and due care on the part of the bank in handling collections for its customers and fulfilling its self-imposed obligations in connection therewith. Although these considerations have all been referred to, it may be well to summarize them briefly. The following requirements constitute "due diligence":

Drafts must be presented at the place of business of the drawee during reasonable business hours, also notes, although if no business address is given, they may be presented at the residence of the maker up to the average time of retiring for the night.

Cash only may be accepted in payment, and documents are to be delivered only on payment.

If payment is refused, the item is to be protested, or immediate notice is to be given of such nonpayment.

Any of the above mentioned may be modified by instructions applying to the item in question, but instructions on the item itself are not to govern unless they are confirmed in writing in the letter or on the deposit ticket with which the item has been inclosed to the bank.

"Due diligence," in a word, consists in obeying either specific or implied instructions implicitly. The amount of due diligence required varies in proportion to the duty imposed specifically or impliedly by the circumstances.

TEST QUESTIONS

1. Describe briefly the duties of a note teller.
2. If an item is unpaid at the end of the day, what steps must the note teller take to protect the bank?
3. What is the relationship that exists between the note teller and the messenger department?
4. Describe briefly the note teller's settlement.
5. Does the note teller handle out-of-town collections as well as the city collection items?

CHAPTER VI

THE TRANSIT DEPARTMENT

In departmental classifications the transit department is a part of the receiving teller's organization, although in a sense it is an accounting medium between the teller and the bookkeeper. As has been stated in an earlier chapter, the check payable out of town is the most expensive to collect. This is true both of the accounting records required and of the external expense or cost incidental to the process of converting funds payable in another city into available cash in hand.

The transit department, as such, does not exist in small banks or even in large city banks that deposit their out-of-town checks with other institutions which specialize in this class of banking service. The theory involved in the transfer of money and credit through the use of bank checks is of sufficient importance in the category of modern banking problems to warrant a separate treatment elsewhere. For the present we shall discuss the practical features of this, the largest and most highly organized department of the average large commercial bank.

Development of Transit Departments

Until the establishment of the national banking system, and for a time thereafter, checks were accepted by banks for deposit, subject to credit only after returns had been received, just as notes and collection items are handled to-day. The use of the personal check

developed very rapidly after the great flood of state bank notes had been taxed out of existence by the National Bank Act, and it was no longer possible to handle checks as separate, individual items except at prohibitive accounting costs. Clearing houses began to be organized to facilitate the presentation and collection of local checks, which thereafter were credited to the accounts of depositors on receipt.

For mutual convenience it became necessary to grant like privileges to depositors who wished to deposit out-of-town items. There was no change in the principle involved, since the depositor was not given the right to draw against these items until returns had been received and the bank retained the right to charge back or reverse the credit for any check returned unpaid. The advantage in the change lay in the fact that a deposit of checks could be handled on the accounting records in totals and not as individual items requiring separate advice and credit in each case. It is unfortunate that most banks, especially in the country districts, have carelessly allowed depositors to fall into the easy habit of regarding a receipt in a pass book for checks payable hundreds of miles away, as a cash credit subject to their immediate draft. Some of our most difficult transit problems are due to this unsound practice.

Competition between banks as they strove to render gratuitous service to their customers forced them to discover ways in which the constantly growing volume of outside checks could be handled at a minimum of cost, and to-day the nearest approach to "scientific management," as it is called in the industrial world, to be found in banking, is the highly organized and specialized transit department.

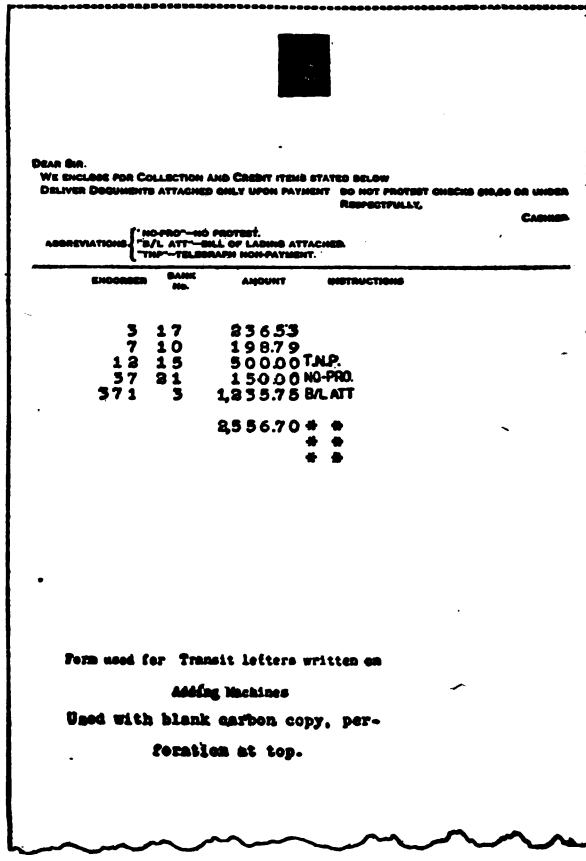
The expression "transit check" is a comparatively new term which originated in a large Chicago bank. A variety of terms has been used in the past, such as

"country check," "miscellaneous," "out-of-town," and "foreign check." (In the Negotiable Instruments Act, a "foreign bill" is a bill of exchange payable outside the state in which it is first negotiated.) The word "transit" conveys an exact meaning in this case. Checks are classified, not as to any inherent differences, but as to their place of payment as compared with the bank holding them. Every check during its accounting journey between the deposit ticket and the individual ledger balance it is drawn against may be rated as a transit check, a clearing-house item, or a self-check. The transit check is the check on the move toward its place of redemption.

Organization of Transit Department

The chief or head of the transit department is called the "transit manager." He may be in charge of a small force of men, or, as is the case in Chicago, which on account of its geographical location is a great check collection center, he may be rated as an officer of his bank, with more than a hundred men under him. But no matter what may be the size of the bank, the work of all transit departments is identical. All out-of-town checks are charged to this department by the receiving teller either in bulk or in certain divisions, based on the outgoing letters which carry the checks to the bank's correspondents. It is the duty of the transit clerks to assort the checks according to the place payable; to indorse them with the stamp of the bank; to list them in letters addressed to the banks to which they are sent; and to mail the letters containing the items at the end of the day. Forms of transit letters are shown in Figures 23 and 24.

The total sent to each correspondent is given to the bookkeepers, and a register record is made each day.



Dear Sir.

We enclose for Collection and Credit items stated below

Deliver Documents attached only upon payment Do not protest checks $50.00 or under

Respectfully,

Cashier.

Abbreviations { "NO-PRO"—no protest. "B/L ATT"—Bill of Lading attached. "TNP"—Telegraph non-payment.

Endorser	Bank No.	Amount	Instructions
3	17	236.53	
7	10	198.79	
12	15	500.00	T.N.P.
37	21	150.00	NO-PRO.
371	3	1,235.78	B/L ATT
		2,556.70	* *
			* *
			* *

Form used for Transit letters written on Adding Machines

Used with blank carbon copy, perforation at top.

FIG. 23.—Form of Transit Letter

This record is checked up as the correspondents acknowledge receipt of the letters and make remittances. When the remittances are received, they are also handled by the transit department and prepared for final disposition. Although in theory all items deposited in the bank go through the receiving teller's department, out-of-town checks that come through the mail never leave the transit department. The operation resembles the collection and distribution of mail matter by the railway post office.

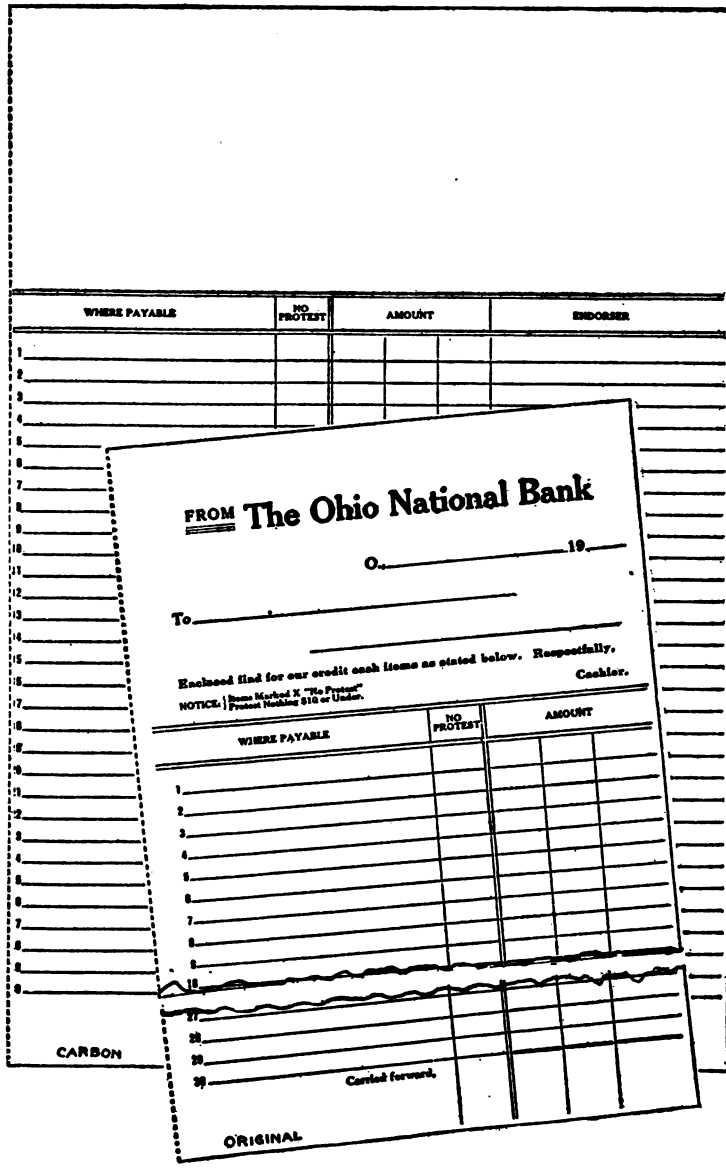
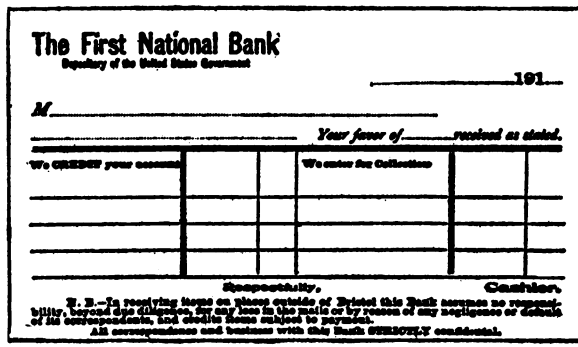


FIG. 24.—Transit Item Letter and Carbon
Duplicate retained by sending bank.

Perhaps everyone has seen the interior of a mail car and has watched the clerks as they open the sacks of mail collected en route distributing the letters in bins and pigeon-holes which are then emptied and the mail placed in sacks to be thrown off the train at each town. This is exactly the process used by the transit department in the receipt and distribution of checks, except that an accounting record is made of each "letter" and its contents.


The First National Bank

Depositary of the United States Government

191

M.

Your favor of received as stated.

We CREDIT your account | We enter for Collection

Respectfully,

Cashier.

R. B.—In receiving items on places outside of [illegible] this Bank assumes no responsibility beyond due diligence, for any loss in the mails or by reason of any negligence or default of its correspondents, and credits items subject to payment.

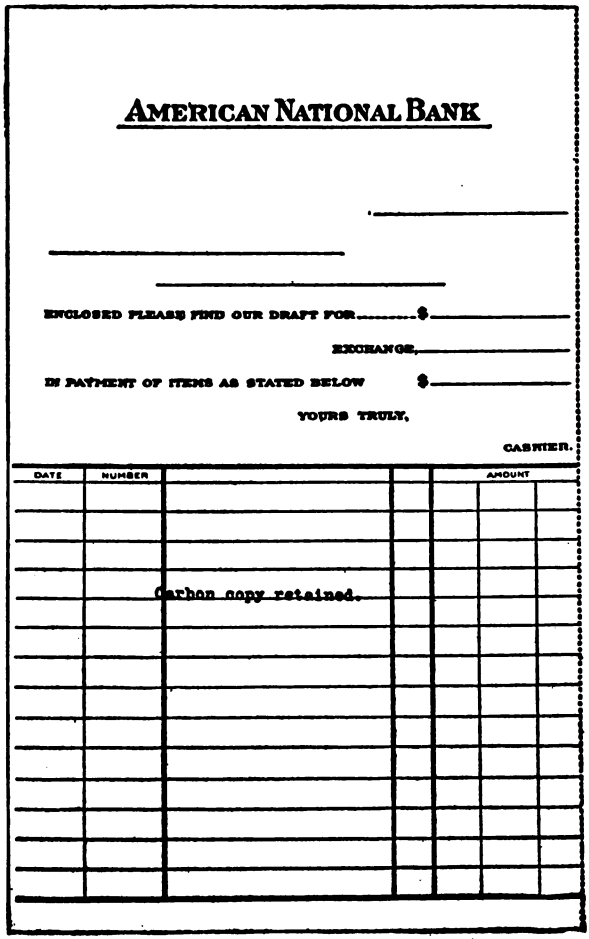
All correspondence and business with this Bank STRICTLY confidential.

FIG. 25.—Acknowledgment of Cash Letter and Report of Disposition of Items

EFFICIENT METHODS

Experience in handling large volumes of transit checks has demonstrated that there are certain fundamental principles which must be observed in the operation of an efficient system. Among these may be noted the following: (1) The division or assortment of the items should be on a geographic rather than on an alphabetical basis as to place of payment and as to the correspondents to which they are sent; (2) the number of times each item is handled within the bank must be reduced to an absolute minimum; and (3) items payable in the smaller towns may be sent direct if within a reasonable distance from the bank, but items payable

in the smaller towns in far distant sections of the country are sent to the banks in the larger cities of such districts. Other requirements might be mentioned, but


AMERICAN NATIONAL BANK

ENCLOSED PLEASE FIND OUR DRAFT FOR ..... $ _____

EXCHANGE, _____

IN PAYMENT OF ITEMS AS STATED BELOW $ _____

YOURS TRULY,

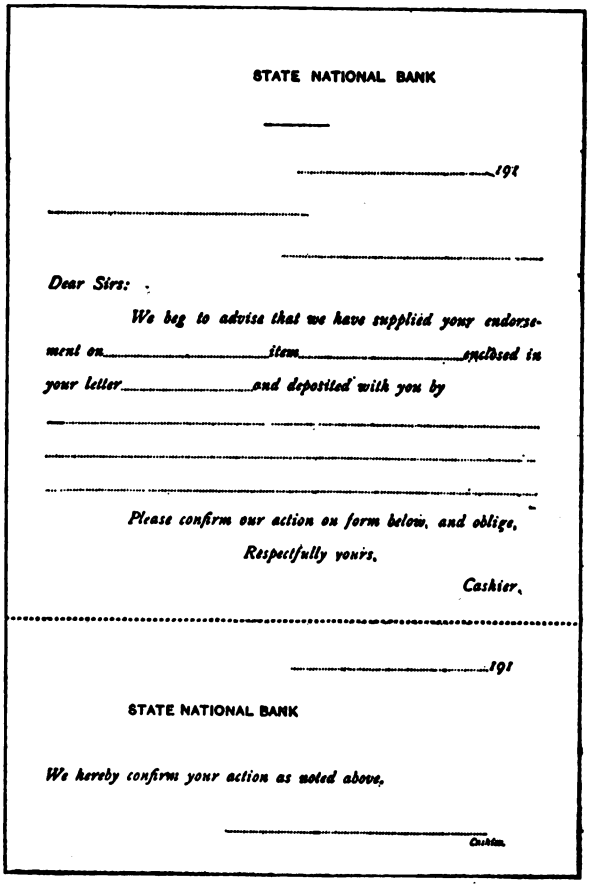
CASHIER.

DATE	NUMBER			AMOUNT		
		Carbon copy retained.				

FIG. 26.—Remittance Letter

these three are the most important. Convenient form memorandums, such as those represented in Figures 27 to 33 inclusive, are great timesavers in transit work.

The only argument in favor of an alphabetical arrangement of country correspondents is that most clerks know that B follows A. The advantages in favor



STATE NATIONAL BANK

_____

_____ 191

_____

_____

Dear Sirs:

We beg to advise that we have supplied your endorsement on _____ *item* _____ *enclosed in your letter* _____ *and deposited with you by*

_____

_____

_____

Please confirm our action on form below, and oblige,

Respectfully yours,

Cashier.

_____ 191

STATE NATIONAL BANK

We hereby confirm your action as noted above.

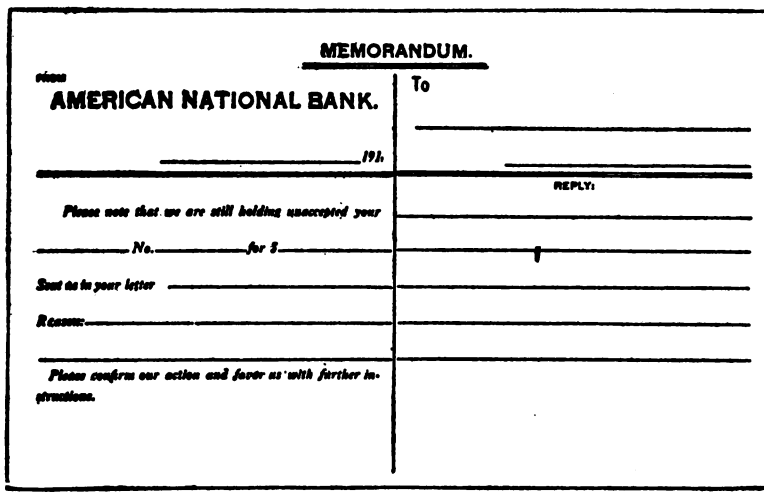
_____

Cashier.

FIG. 27.—Bank Advice Memorandum

of the geographical system are many. It is easier for new clerks to assort the transit checks, because all they need to remember is the location of each state. Under the alphabetical system it would be necessary, for instance, to know whether a small town in Ohio is sent

to Cincinnati for collection and is thus assorted among the C's, or whether it is farther down the river and is to be sent to Louisville, among the L's. Of course, accounts within each state are kept in alphabetical order.


MEMORANDUM.

AMERICAN NATIONAL BANK.

To

_____ 191

REPLY:

Please note that we are still holding unaccepted your

_____ No. _____ for $

Sent us in your letter

Reason:

Please confirm our action and favor us with further instructions.

FIG. 28.—Bank Advice Memorandum

Another advantage is that letters to some sections of the country can be mailed at an earlier hour and thus make good train connections; this insures quicker returns. Attention can be concentrated at different sections of the transit department, which is mechanically far easier than if letters should need to be taken out here and there, as would be the case under the alphabetical system.

A final advantage lies in the direction of records and statistics. Rates of exchange, methods of remittance, and general conditions vary with respect to different sections of the country. The best men, therefore, can be assigned by the transit manager to those sections requiring the greatest care and judgment in routing checks. It is also possible to keep an accurate record easily of the volume of items handled in each state.

The need for concentration increases inversely according to the size of the bank receiving transit checks on deposit. At the end of a day's work the bank will find itself in possession of items payable at perhaps a thou-

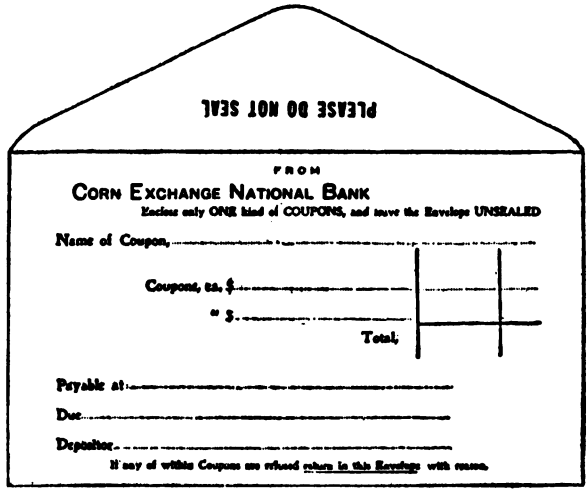


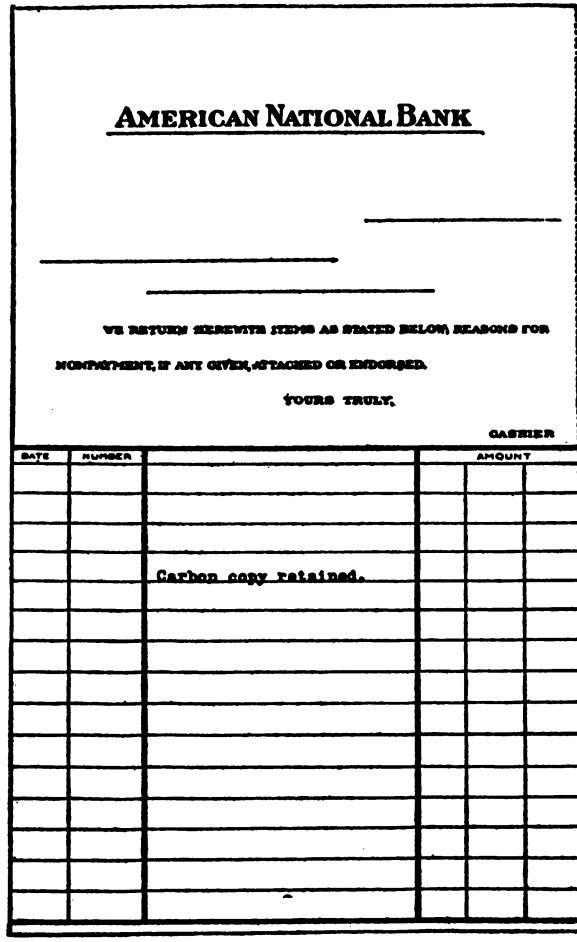
FIG. 29.—Coupon Envelope

Some envelopes are numbered and have attached thereto a stub which has the corresponding number. This stub is detached and identifies the owner. This is done so as not to disclose ownership.

sand different places. If the bank is not large, it is both impractical and unnecessary to send every check direct to the town where it is payable. The cost of accounting, bookkeeping, and stationery, not to mention the postage, would be prohibitive. The items are, therefore, concentrated according to the sections in which they are payable and sent to correspondents or reserve agents in those sections. Even very large banks concentrate items payable within limited districts, such as counties, sending all to one correspondent located in the county seat. This mechanical need for concentration is the germ of many clearing plans, including that of the federal reserve system.

Each check received on deposit must undergo a process of accounting, which requires that it be handled a certain number of times. The transit check is subject to the greatest attention in this direction. It is handled:

1. By the receiving teller's assistant, who assorts it in its proper division under the "batch system" previously described.



AMERICAN NATIONAL BANK

WE RETURN HEREWITH ITEMS AS STATED BELOW, REASONS FOR NONPAYMENT, IF ANY GIVEN, ATTACHED OR ENDORSED.

YOURS TRULY,

CASHIER

DATE	NUMBER		AMOUNT		
		Carbon copy retained.			

FIG. 30.—Returned Item Letter

2. By the adding-machine operator, who lists it in proving the deposit ticket.
3. By the transit clerk, who (1) assorts it as to point of collection; (2) indorses it with the bank stamp; and (3) lists it in the outgoing letter.

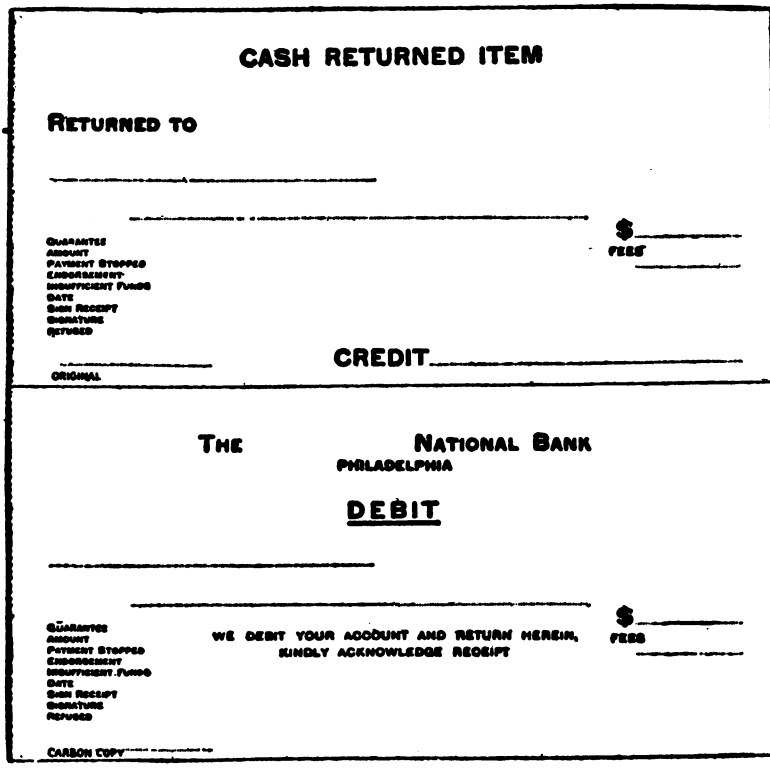


FIG. 31.—Returned Item Forms

Nor is this all. The total amount of which the check is a part is charged by the bookkeeper to the correspondent to which the letter is sent; the amount is listed on the transit register to be checked when remittance or acknowledgment of receipt is received; and when the remittance draft is received it, in turn, must be

BANK OF COMMERCE

_____

_____

Gentlemen:

This is only to notify you that we are without returns on the following items:

Date Received	Where Payable	Amount

This notice does not necessarily imply non-payment, as the advice of remittance may have gone astray in the mails. We are doing all we can to hasten returns, but you may consider the same UNPAID until you receive further advice from us.

Yours very truly,

Cashier.

_____ Per_____

ORIGINAL Auditor.

BANK OF COMMERCE

_____ _____

_____

Gentlemen:

Referring to our advise of NON-PAYMENT, sent you on date indicated below, regarding the following items:

Date Received	Where Payable	Amount

We beg to advise that we have received a remittance for same today.

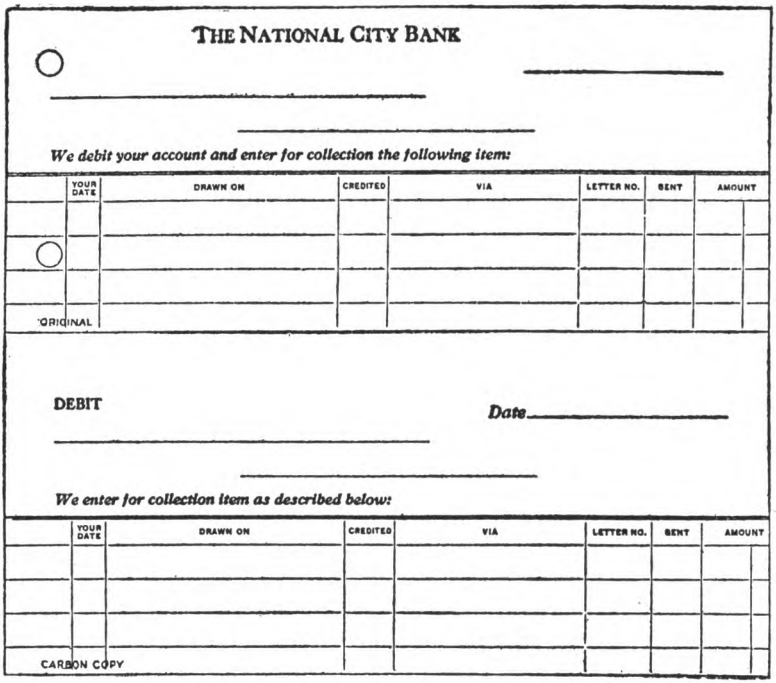
Yours very truly,

Date of Previous Advice.

_____ Per_____

CARBON COPY Auditor.

FIG. 32.—Collection Memorandum



THE NATIONAL CITY BANK

We debit your account and enter for collection the following item:

	YOUR DATE	DRAWN ON	CREDITED	VIA	LETTER NO.	SENT	AMOUNT
ORIGINAL							

DEBIT

Date

We enter for collection item as described below:

	YOUR DATE	DRAWN ON	CREDITED	VIA	LETTER NO.	SENT	AMOUNT
CARBON COPY							

FIG. 33.—Charge Ticket and Advice

accounted for on the books and collected. When we consider that a large bank will handle from twenty-five thousand to one hundred thousand separate transit items daily, we can readily understand the necessity for a well-organized and efficient accounting system in the transit department.

ACCOUNTING METHODS

Transit departments are sometimes organized with an efficiency that would do credit to a German army corps. Although the incoming items cannot be controlled altogether as to the time of deposit, the clerks are so assigned as to be immediately available to meet any point of attack, so to speak. If a large part of the

transit checks are received through the mails from other banks, as is usually the case, men may be drawn temporarily from other departments to help the transit or "in-mail" men. As soon as a good start has been made, the clerks return to their own subdivisions, and they are able to have their desks well cleared and ready by the time the first deposits begin coming in across the counter.

The main object is to prove the incoming deposits as quickly as possible and thus prevent a congestion at the source of supply. It is this part of internal bank work which seems the most complicated and chaotic to the layman. If we keep in mind constantly the general idea of bank accounting and think in terms of the small country bank, what appears to be a hopeless jumble of clerks, checks, sheets, and adding machines in the large bank is more easily comprehended.

In making up the outgoing transit check letter, banks have adopted many labor-saving methods. The first is the form of indorsement used. At one time, all banks

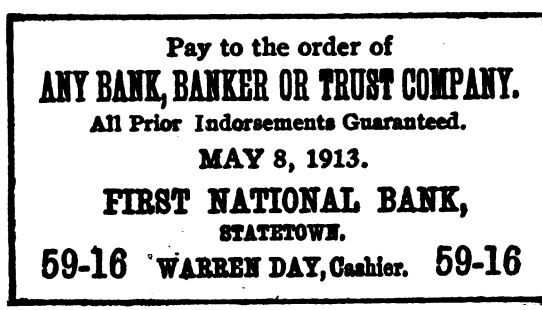


FIG. 34.—Bank Indorsement Stamp

used the straight indorsement stamp, that is, the stamp which indorsed the items over to the bank to which they were sent for collection. This required a different stamp for each correspondent, and the checks could only be indorsed after they had been finally assorted. To-day

nearly all banks use what may be called the general indorsement stamp, which reads: "Pay to the order of any bank or banker." Figure 34 shows the complete form of an indorsement stamp. With this stamp the checks may be stamped in bulk either by machine or by hand, the work being assigned to the clerks who are the most dexterous in handling the checks rapidly. Adding machines have already been referred to. Electrically driven machines which both list the items and permit of description as to place payable are now in general use.

Transit Numbers

A system has been devised by the clearing-house section of the American Bankers' Association which provides for the use of numbers in describing place payable. This is called the "universal numerical system"; it assigns a distinctive number to every bank in the United States, known as the "transit number." These numbers are hyphenated and consist of a prefix, which designates the state or city in which the bank is located, and a suffix number, which designates the bank. For instance, 1-13 is a bank in New York City; 3-1, a bank in Philadelphia; 50-36, a bank in New York state; 90-42, a bank in California. These numbers are printed on the checks and are used in making up transit letters. Should it become necessary to refer to a number to identify a lost item, for example, a key is published which contains all the numbers in both numerical and geographical order.

No Protest Instructions

Another labor-saver is the system of designating "no protest" instructions devised by Thomas A. Scott, of Lynchburg, Virginia. "Instructions" applying to cash

or collection items consist principally of "wire if unpaid" and "do not protest if unpaid," the latter sentence being shortened in actual practice to "no protest." The legal ruling in force is that instructions on the letter, rather than on the item, are to govern the disposition of the item. In other words, if a check should have attached to it a slip reading "no protest," without any confirmation being written opposite the amount in the letter inclosing it, the check might be protested in case of nonpayment. This meant that clerks were compelled to search incoming letters for these instructions and then to note the same instructions on their own outgoing letters inclosing the items. Here was an extra detail of work which the new system makes unnecessary without doing any violence to the rule of law above referred to. Banks now stamp "no protest" items on the face with a small stamp reading "N-P 16-51." The number used is the transit number of the bank in which the item is originally deposited. The letterhead then bears the printed instructions: "Do not protest any item stamped 'N-P 16-51' or bearing a similar stamp." In this way the item itself carries the instructions through to the bank finally presenting it for payment, and it is no longer necessary for each bank to relay the instructions to its correspondents.

Settlement

Each division of the transit department is charged by the receiving teller with the amount of checks handed to it during the day. These totals consist of the recapitulated totals of the batch sheets described earlier. As soon as all checks are in, the transit clerks add up their outgoing letters, and the total amount must agree with the amount charged by the teller. If a difference is disclosed, the items are "looked back" to see that they

are properly listed. As soon as settlement is effected, the letters are sealed and weighed and the proper postage affixed. During the day, collection items, advices of credits, returned items, and other memoranda are inclosed in the envelopes. A carbon duplicate of the outgoing transit letter is retained, and the bookkeepers make their charge entries either from these carbons or from the transit register. The total amount finally appears in the general ledger item "due from banks." This item will be further explained when we take up the accounting of the general ledger bookkeeper.

Systems of Collection.

The history of the development in the use of checks and the evolution of systems used by banks to effect collection of checks drawn upon other institutions is an interesting phase of practical banking and will be more fully discussed in a later chapter. A brief description of the several methods now employed is necessary, however, to arrive at a clear understanding of the transit department.

There are, at the present time, three general collection systems which may be defined in the order of their adoption by banks as follows:

1. The independent system.
2. The country clearing-house system.
3. The federal reserve system.

THE INDEPENDENT COLLECTION SYSTEM

The first of these is the natural result of our independent banking system and the method of carrying reserves prior to the Federal Reserve Act. The National Bank Act classified all national banks, regardless of size or importance, in three groups—country

banks, reserve city banks, and central reserve city banks. Country banks were permitted to carry 9 per cent of their reserve as balances with reserve or central reserve city banks; reserve city banks could keep 12½ per cent of their required reserve with central reserve city institutions, while the latter were compelled to maintain a 25 per cent reserve entirely in their own vaults.

The reserve and central reserve city banks found it profitable to compete for country bank accounts and offered the same inducements which the average bank presents to its depositors, that is, the collection of checks and drafts. Through an unfortunate ruling of the Comptroller of the Currency, continued through successive administrations, country banks were permitted to count as reserve all debits against their accounts with reserve agents, which, in addition to collected balances, also consisted largely of checks which at the time the debit entry was made on the books of the country bank, might not have left the custody of the local post office. This relation between the country bank and its reserve city agent was repeated in a lesser degree between the reserve city bank and the central reserve city institution. The result was a system of pyramided and often entirely fictitious reserve which invariably broke down in the event of a monetary stringency, when every bank tried to convert this inflated book reserve, consisting of uncollected checks, into medium-of-exchange currency. This recurrent danger and inconvenience, which invariably crippled the flow of domestic exchange, had an important part in hastening the adoption of remedial legislation in the Federal Reserve Act.

A further weakness in the independent system was to be found in the encouragement it gave to country banks to impose arbitrary and often exorbitant exchange charges for remitting for checks drawn upon themselves. Knowing that his reserve balance was of considerable

value to a city bank, the country banker would either place it where he could get the greatest amount of checks in his own town for remittance—less the exchange charge—regardless of more legitimate reserve requirements, or else scatter it about among the fifty reserve cities in parcels, levying exchange tribute upon all of them. Meanwhile, he insisted that the city bank permit him to concentrate the checks he had received from his own depositors with them for collection at par.

The result of this system, still in wide operation, was to draw checks far out of their proper channels of collection, the country banker seeking an outlet at par at a point where he could secure the highest rate of exchange and interest upon his balances in return, and the city banker attempting to avoid excessive exchange charges by permitting delayed remittances, or else placing the burden on its own correspondents by routing the checks in a roundabout or circuitous manner. The fundamental weakness in the independent system lies in the fact that it gives too much power to the thousands of isolated country banks to impose their will upon all other banks as to exchange rates.

If the city banks form defensive alliances to protect themselves and their customers, they are in danger of legal prosecution for adopting measures "in restraint of trade." The burden of this indirect, expensive, and altogether unsatisfactory system of independent arrangements is ultimately borne by the public, either in the shape of high rates of exchange charged them as indorsers on checks they deposit, or else in the excess balances which they are forced to carry to entitle them to have their collections made at par. This statement should not be construed to mean that the depositor should escape a proper charge for service rendered. As we have pointed out, the average bank customer already secures more free services than the profits from his

account entitle him to. It does mean, however, that the customer should be assured that he is paying only for efficient and scientifically performed service and not for taxes to perpetuate an antiquated and totally inadequate system of check collection.

THE COUNTRY CLEARING-HOUSE SYSTEM

About the year 1899 efforts began to be made to correct the abuses incidental to the independent systems just described. The most notable movement in this direction was the so-called "country clearing house," installed by the Boston Clearing House for the collection of checks payable in New England. Other associations followed suit at intervals, and to-day the number of clearing houses which have adopted this solution of the transit problem is increasing rapidly. A description of the details of this system is given in the chapter on "Clearing Houses." Briefly, the country clearing house may be described as an agency which acts jointly for all the members of a clearing house. In the collection of their transit checks it bears the same relation to city banks as the banks bear toward their own depositors. Strictly speaking, the checks are not "cleared," but they are collected by the clearing house as one "bank" acting for all. The advantages of this system are that the mechanical details of accounting are much simplified; this results in a saving of stationery, postage, and clerk hire, since each bank at the end of the day, instead of making debit entries against a hundred or more country banks, has a single total representing the amount due from the clearing house. The banks are also in position to secure more favorable rates from the country bankers, since the latter receive their checks in one letter instead of from each city bank individually.

THE FEDERAL RESERVE CLEARING SYSTEM

The Federal Reserve Act, which has introduced the latest development in check collection, provides that the reserve banks may receive on deposit from their members, checks and drafts drawn upon other members, i. e., transit checks. No restriction is placed upon their receiving checks drawn upon nonmembers as well, and in the event of all banks not entering the system, it is the expectation that ultimately the reserve banks, organized for the primary purpose of serving their members, will receive all checks, regardless of place of payment, if the member banks find it profitable and convenient to collect their transit checks through this agency.

The act goes further, however, and states that the Federal Reserve Board may require the reserve banks to act as clearing houses for their members. Immediately this function is undertaken by the reserve banks, the relation between member banks becomes that of members of a joint clearing house. That is, what were formerly "transit checks" can be sent to the reserve bank as to a clearing house and thus establish a credit against which may be applied as an offset the checks against each member received by the reserve bank. The resultant debit or credit balance is then settled for by each member with its reserve bank. This development is as yet scarcely far enough advanced to enable us to draw any conclusions, but it seems to be the logical and ultimate solution of the transit problem. It is a step in advance of the country clearing-house method, just as the latter was a tremendous improvement over the independent system.

We can illustrate the evolution of the three systems and compare them with each other by assuming that there are a thousand business men in a city, each having

bank accounts with one or another of five local banks. If we let these one thousand depositors represent our country banks, under the independent system each individual upon receiving say one hundred checks a day, would present each item at the counter of the paying bank and upon receiving cash would then deposit it in his own bank. Under the country clearing-house system each man would deposit all his checks in his own bank, and the banks would then each send a messenger to the others, receiving in a lump sum payment for all checks deposited by their customers. Under the federal reserve plan, the five banks would form a clearing house, meeting together at one place where debits and credits would be offset and the balances only paid in cash.

Evolutions in banking practice are slow in developing, and it may be several years before the ideal system of collecting transit checks is attained. It is safe to say, however, that the American banker will finally solve this problem, since it is becoming more certain that clearing is the perfect banking principle.

Analysis of Accounts

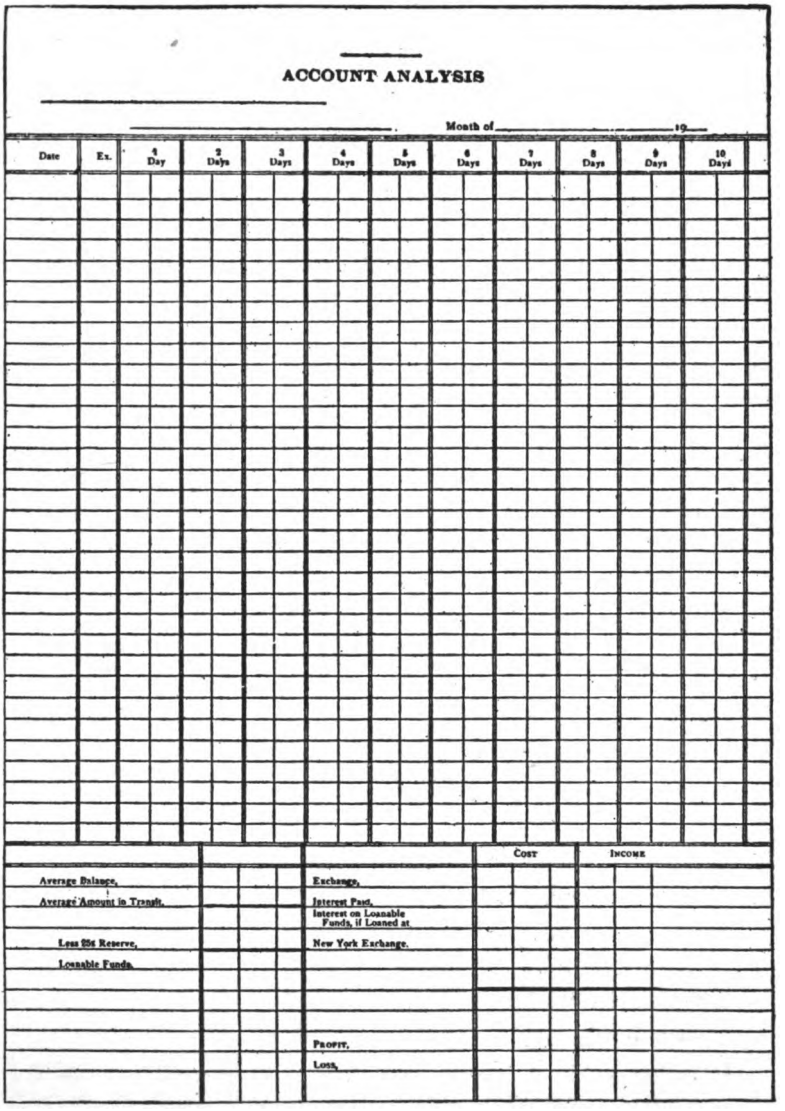
The cost incidental to handling transit checks and converting the proceeds into available cash makes it necessary that banks, more particularly those in the natural collection centers, shall have at hand precise records showing the status of each account on their books. When a depositor gives to his bank a hundred checks payable in as many different cities, it is necessary that both he and his bank shall know when the proceeds become available for use. Since it is no longer practicable to defer book credit until each individual item is paid and accounted for, a system had to be devised to prevent the depositor from drawing against funds not yet in the possession of his bank. This is accomplished

by a process of accounting known as "analysis" or "cost accounting."

The item in the statement of the resources of a bank classified as "due from banks not reserve agents," represents checks in process of collection or that part of the deposits which are not yet available for loaning purposes. Technically, outstanding checks (deposited) are known as "float." In analyzing an account, the purpose is to determine how much of each book balance as shown by the individual ledger consists of float. The analysis department goes over the deposit tickets or incoming letters inclosing transit items and sets down in parallel columns the amounts which will be outstanding three, five, seven, or a greater number of days, depending upon the distance at which the items are payable. These are facts which must be ascertained from actual conditions in each instance.

Convenient forms for recording these items are shown in Figures 35 and 36. Figure 35 illustrates a system for making an exact or minute analysis. Since analysis need not be too laboriously exact, which involves unnecessary expense, a more general or average method of reckoning may be recommended, as indicated in Figure 36. The same results are achieved with a less cumbersome sheet. In making up time and rate columns the location of the bank and the nature of its business must, of course, be taken into consideration. Generally a few columns will suffice. For example, $1,000 outstanding two days is the same as $500 outstanding four days. The same rule may be applied to exchange rates, a wide scale being covered by a few columns.

This record is kept for the period of a month, at the end of which time the columns are footed to show the total amount outstanding and the length of time. By multiplying each column by the figure representing the number of days, adding the products



ACCOUNT ANALYSIS

Month of _____ 19__

Date	Ex.	1 Day	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days	8 Days	9 Days	10 Days

together, and dividing by thirty (or thirty-one), the average daily amount outstanding is arrived at. By subtracting this amount from the average daily balance as shown by the ledger, it is ascertained what the actual balance of the depositor has been. The law requires a certain reserve to be held against deposits, and after this percentage is deducted, the bank is able to estimate the average *loanable* balance of the depositor. By applying the current loaning rate for money to this net balance, the bank can then figure its gross profit on the account.

This profit, however, is affected by certain fixed costs which must be applied to it. The largest item is that of exchange charges which the bank has paid to its correspondents for remittances. Rates vary from 25 cents to $2.50 per thousand dollars. The analysis department in addition to "timing" each item to arrive at the float, also lists the amount under the proper heading, showing the rate of exchange cost. These amounts are added together to arrive at the total cost of exchange. The next item of expense will be the interest allowed the depositor. Active accounts may receive interest at from 2 to 4 per cent. Finally the "overhead" cost incidental to the work involved may be applied. As a general rule this will be found to average from one to 3 cents per item, or, based upon amounts, from 7 to 10 cents per thousand dollars collected.

The total costs are then applied to the theoretical income, and the result is the net profit or loss on the account during the month. This is shown on the analysis record card, Figure 37. If the account shows a loss, the depositor is asked to readjust either by paying the cost of operation or by paying a fixed rate of exchange on checks deposited. Or he may increase his balance by allowing the bank more time before drawing against his deposits; or, again, no interest will be paid him.

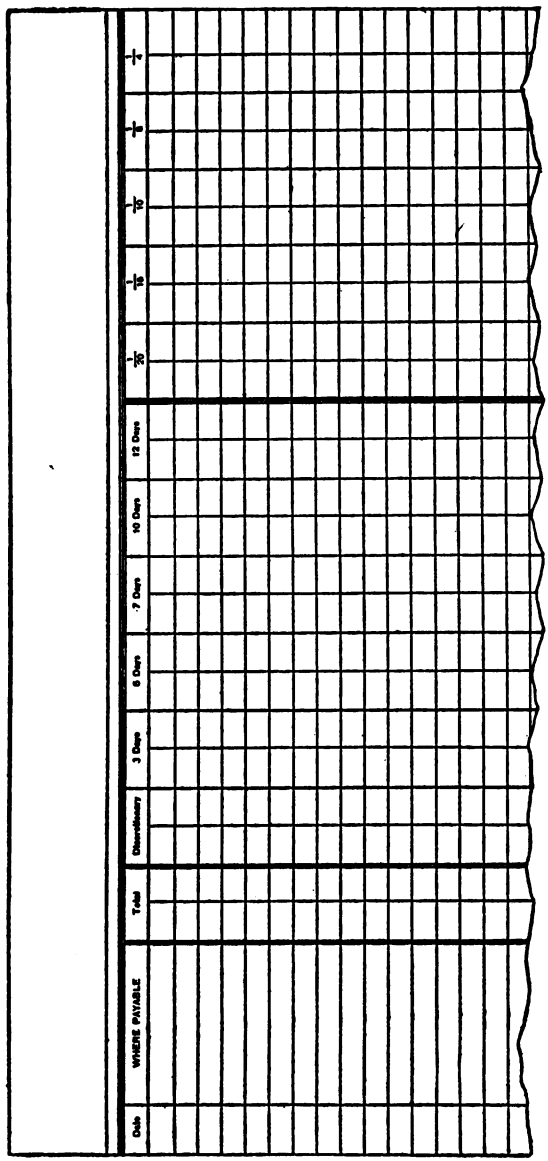


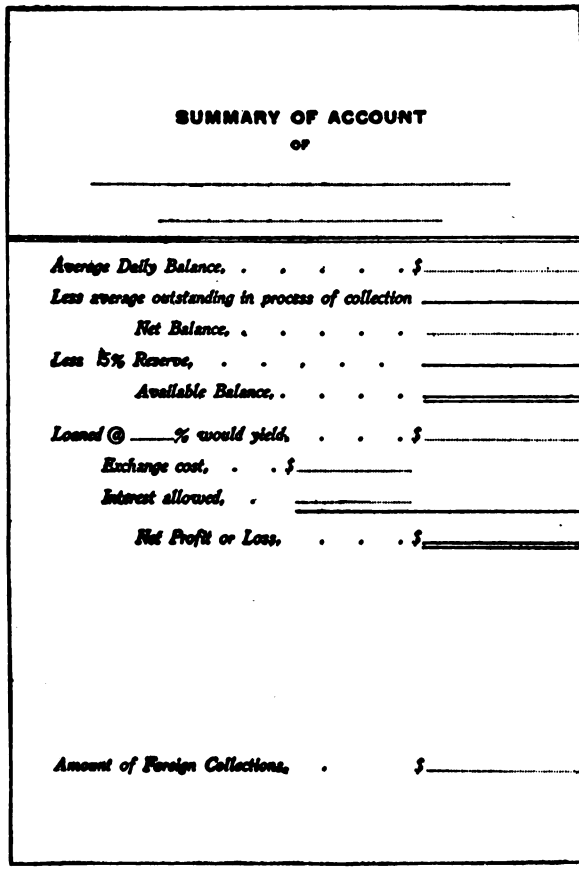
FIG. 36.—Simple Account Analysis

ANALYSIS SUMMARY of

AGREEMENT.

19	RATE %	PROFIT OR LOSS	AMOUNT OF FOREIGN COLLECT. FOR TRANS. ACCT.	AVERAGE DAILY BALANCE	AVERAGE DAILY OUTSTANDING	EXCHANGE COST	ALLOWANCE ON COLLEC. FOR US	REQUIRED BALANCE	REMARKS	ADJUSTMENT
JAN.										
FEB.										
MAR.										
APR.										
MAY										
JUNE										
JULY										
AUG.										
SEPT.										
OCT.										
NOV.										
DEC.										

FIG. 37.—Analysis Record Card



SUMMARY OF ACCOUNT
OF

_____

_____

Average Daily Balance, ... $_____

Less average outstanding in process of collection _____

Net Balance, ... _____

Less 5% Reserve, ... _____

Available Balance, ... _____

Loaned @ ____% *would yield,* . . . $_____

Exchange cost, . . $_____

Interest allowed, . _____

Net Profit or Loss, . . . $_____

Amount of Foreign Collections, . $_____

FIG. 38.—Summary of Account

The results of each month's calculations are posted on cards for each account which are carried as a permanent record. Figure 38 shows a form of summary usually sent to depositors or correspondents when the account is unsatisfactory.

TEST QUESTIONS

1. What is the primary reason for the great development of the modern transit department of a bank?

2. Where did the term "transit check" originate?
3. Wherein is the geographical system of sorting superior to the alphabetical system of sorting?
4. Outline briefly the steps a transit check takes before it reaches the place of payment.
5. What are the two outstanding labor-saving devices to facilitate the handling of the transit check?
6. What was the outstanding weakness of the independent collection system?
7. Why is the federal reserve clearing system sound in principle? Is the idea a new one?
8. Describe briefly the process of analyzing an account.
9. Can "floats" be ignored in an analysis?

CHAPTER VII

LOANS AND DISCOUNTS

We may now turn for the moment from a further consideration of the departments organized for the service of the bank's customers and discuss the most important department concerned with self-interest, so to speak. In a broad sense, the entire institution is given over to public service, but the loan and discount department's immediate function is to look after that phase of banking which represents income, rather than outgo. The customers of a bank are, in the greater part, of two varieties—depositors and borrowers. In an economic sense the bank acts as the medium between the two, receiving from the one surplus funds which are accumulated into liquid capital and then distributed in the shape of loans to the other, thus creating new deposits.

In making loans, the bank does not act as the agent of the depositor but assumes the part of principal and owner of the money, for the safe return of which it is, however, responsible to the depositor. It is chiefly for this reason that greater care must be used in handling notes, representing loans, than is required of checks received on deposit in the collection of which the bank acts as agent. That is to say, if a check is returned unpaid, the bank has the right of charging the amount to the depositor and returning it to him, whereas if a loan is unpaid, the bank must suffer the loss, since it

would be impossible to loan each depositor's balance separately and at his risk. The security of the loan, therefore, is of greater importance than the rate of interest earned upon it.

Much may be written upon the elements of security affecting bank investments and the conditions which govern the rate of interest, but these abstract matters may be put into the background while we take up the concrete detail and routine of the loan department.

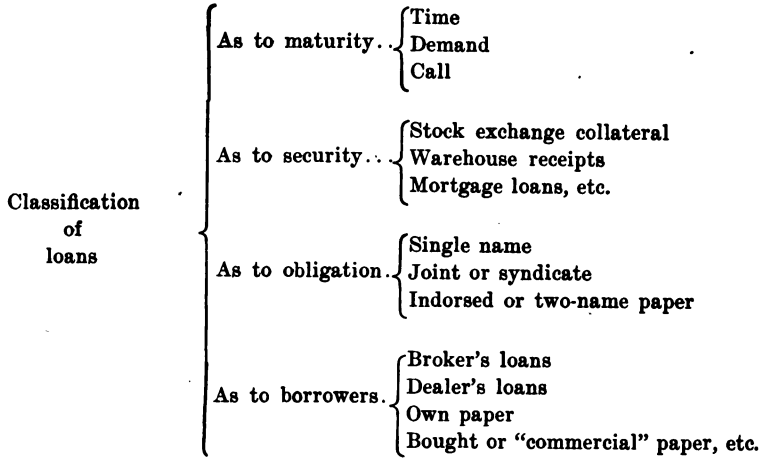
Duties of Loan Department

This department, it may be recalled, belongs to the executive group. Its duties, however, are clerical rather than administrative; in fact, much more so than those of the credit department. The latter department is employed chiefly with loans before they are made, whereas the loan department's work begins after the loan is effected. In their chronological order these duties consist of figuring the interest or discount, recording the loans permanently upon the bank's records, filing the notes or evidence of the loan in the portfolios for safe-keeping, seeing to it that they are presented for payment at maturity, and canceling the obligation after payment has been made.

Many loans are made upon collateral security consisting principally of stocks and bonds, and the work of accounting and caring for such security is in itself no small task. National banks are prohibited by law from loaning on real estate except within certain limitations, but such loans often constitute the major portion of the loans of state banks and trust companies. We will confine the present discussion to the loans and discounts of the more strictly commercial institutions, although the same accounting principles apply in all cases.

Kinds of Loans

Loans may be classified in several ways, as here shown:



On the bank's balance sheet or general ledger the ordinary classification of loans consists of *demand* loans and *time* loans so divided on account of the difference between their liquidity as assets. It may be noted here that the Federal Reserve Board requires the reserve banks, for statistical purposes, to report their loans as to the nature of the commodity which they are issued to "carry." For example, the banks of the South "carry" cotton; that is, they finance the growing, warehousing, and sale of that staple. The banks of the west "carry" corn, wheat, and other grains.

It will serve no useful purpose to attempt to describe in detail the variations in the loaning habits of different sections of the country as indicated by the methods employed in the banks of each district. Naturally, the kind of loan most used and the average tenor of the notes will bear some relation to the needs of agriculture or industry. A crop that has a long season will give

rise to "paper" (the general term applied to negotiable instruments used in borrowing money) of long maturity, and similarly a business or industry that permits of a quick "turnover" between the purchase of raw material and the sale of the finished product will produce thirty or sixty-day paper. Strictly commercial paper consists of loans that are "self-liquidating"; that is, they are paid out of the proceeds of the sale of the commodity which they are issued to finance. It is this class of loans which may be rediscounted at the federal reserve banks and become the security for bank-note issue.

Before going further into loan classifications and the distinguishing features of each kind of loan, we may explain the significance of the term which is used to describe all loans, that is, "loans and discounts." The words as used by banks are not synonymous, although the distinction is based on mere technicalities.

A discount is a loan upon which the interest is collected or deducted at the time the loan is made. Discounts are time loans having a fixed date of maturity and may or may not be secured by collateral.

A loan, on the other hand, is usually payable on demand, which is definite enough to conform to the requirements of the Negotiable Instruments Act but not sufficiently definite to permit of interest being charged in advance.

Such loans are generally secured by collateral, and the interest is added when the loan is paid; or, if the loan is allowed to run for a relatively long period, the interest may be paid quarterly. On "discounts" the rate is fixed, but on loans the interest may fluctuate. For this reason, and also because the date of payment is optional with the bank or the borrower, interest cannot be figured in advance on "loans"; hence the shade of meaning between "discount" and "interest."

We may now describe the various classes of loans in more detail, keeping in mind the fact that although small banks do not handle all kinds of loans common to the larger institutions, the accounting necessary for each particular kind of loan is practically identical, regardless of the size or kind of bank.

Single-name paper represents loans to an individual firm or corporation on their own note of hand without any other responsibility than that of the general credit of the maker. Although two or more names may appear on a note either as makers or indorsers, it is still single-name paper if the names represent identical interests. Sometimes the members of a firm will indorse their firm notes personally, but unless they are possessed of considerable outside means entirely apart from their business, such indorsements merely strengthen the moral risk, and the instrument is still single-name paper. Again, a firm may have a subsidiary organization trading under a separate name but with identical interests, so that although both names appear on the note—one as maker and the other as indorser—the obligation is still essentially single-name paper. Failure to guard against this contingency has caused many bank losses, since a single failure may affect several allied companies.

Bills receivable or *trade paper* are notes having two or more names given in settlement of business transactions. So far as security goes, we may also include in this class of loans, notes having "accommodation" indorsements, that is, what would otherwise be single-name paper, indorsed by one or more disinterested parties who thus lend their credit to the maker. In passing, it may be mentioned that with the exception of bank acceptances which will be treated in a separate chapter, practically all loans which member banks may rediscount with the federal reserve banks are limited to the two classifications thus far described.

A well-known banker during the formative period of the federal reserve system gave the following definition of "commercial paper" (that is, paper eligible for rediscount):

> Commercial paper consists of promissory notes, bills of exchange, or acceptances in negotiable form representing advances to be used in the production, manufacture, distribution, or storage of commodities for which there is a constant, periodic, or seasonable demand by consumers, merchants, or manufacturers, so that in the natural course of events the satisfying of this demand within a reasonable lapse of time from date of issuance of the paper will result in the payment of the notes, bills of exchange, or acceptances thus created. For illustration, under this definition, the financing of bricks in the process of manufacture would be proper, but the financing of a building in which these bricks are used as construction would not.

Collateral loans, as the term implies, are loans secured by some form of negotiable collateral, such as stocks, bonds, bills receivable, bills of lading, warehouse receipts, etc. The bank usually requires that the collateral shall have a current or market value at least 20 per cent in excess of the loan. This margin is fixed to guard against depreciation in the value of the security offered. Loans on collateral security are analogous to pawnbrokers' loans; in fact, it is not uncommon to find a pawnshop seeking to dignifiy its existence by advertising itself as a "collateral loan bank." The distinction is in the collateral offered rather than in the principle involved. Notes secured by collateral carry a clause which assigns the collateral, whatever it may be, to the bank in case the loan is not paid when due. Mortgage loans are collateral loans secured by real estate, this being a type of loan which national banks are permitted to make within certain limitations, although state banks, trust companies, and savings banks are not so restricted. Loans

secured by chattel mortgages against crops or live stock are common in the agricultural sections and are made by all classes of banks in such districts. "Cattle paper" is extensively dealt in, in the Southwest and Middle West. Specimen forms for collateral loan notes are found in Figures 39 and 40.

$..... .....19....

.....after date

.....promise to pay to

.....

or order at the.....

..... DOLLARS,

for value received, having deposited as collateral security for the payment of this and any other liability of the undersigned to the holder hereof, due or to become due or that may be hereafter contracted, the following property, to wit:

.....	.....	.....
.....	.....	.....

the market value of which is now $....., with authority to sell, transfer or re-hypothecate said collateral, it being understood that on payment or tender of the amount so due, the holder hereof may return to the undersigned an equal quantity of said securities instead of the securities deposited; with the further right to the holder to call for additional security in case there should be a decline in the market value of the securities deposited herewith, and upon the failure of the undersigned to comply with said demand and to deposit with the holder hereof additional security to be approved by said holder sufficient to cover said decline, this note shall become instantly due and payable as though it had actually matured, and all the rights hereby conferred to dispose of said collateral shall at once be exercisable at the risk of the undersigned in case of any deficiency in realizing proceeds.

Full power and authority are hereby given the holder hereof to sell, assign and deliver the whole of the above-mentioned securities or any part thereof or any substitutes therefor or any additions thereto at the Broker's Board or at public or private sale, at the option of said holder or his assigns, on the non-performance of this promise or the non-payment of any of the liabilities above-mentioned or at any time or times thereafter, without demand, advertisement or notice, and after deducting all legal or other costs and expenses of collection, sale and delivery, to apply the residue of the proceeds of such sale or sales so made to the payment of any or all of the liabilities above-mentioned, as said holder or his assigns shall deem proper, returning the overplus to the undersigned. It is also understood that upon any sales of any of said collateral securities, said holder may become the purchaser thereof absolutely free from any claim of the undersigned. THE MAKERS AND INDORSERS HEREOF HEREBY WAIVE THE BENEFIT OF THEIR HOMESTEAD EXEMPTION AS TO THIS DEBT AND DO FURTHER WAIVE DEMAND, PRESENTMENT, PROTEST AND NOTICE OF DISHONOR.

FIG. 39.—Collateral Note

$..... OHIO,.....19....

.....AFTER DATE, FOR VALUE RECEIVED, THE UNDERSIGNED PROMISE TO PAY TO THE ORDER OF

THE FIRST NATIONAL BANK OF

AT ITS OFFICE,

.....DOLLARS,

WITH INTEREST AT THE RATE OF.....PER CENT, PER ANNUM.

THE UNDERSIGNED HA.... DEPOSITED WITH SAID BANK AS COLLATERAL SECURITY FOR THE PAYMENT OF THIS AND ANY AND EVERY LIABILITY OR LIABILITIES OF THE UNDERSIGNED TO THE SAID BANK DIRECT OR CONTINGENT, DUE OR TO BECOME DUE, OR WHICH MAY HEREAFTER BE CONTRACTED OR EXISTING, THE FOLLOWING PROPERTY, VIZ.:

.....

.....

together with all other securities in the possession of said bank belonging to the undersigned or in which the undersigned has an interest; hereby agreeing to deliver to said bank additional securities to its satisfaction, upon demand of said bank, also hereby giving to said bank a lien for the amount of all said liabilities of the undersigned to said bank upon all property or securities which now are or may hereafter be pledged as collateral with said bank by the undersigned, or in the possession of said bank in which the undersigned has any interest, and, also upon any balance of the deposit account of the undersigned with said bank. On the non-performance of this promise, or upon the non-payment of any liabilities above mentioned, or upon the failure of the undersigned forthwith to furnish satisfactory additional securities on demand, at the option of said bank, this obligation shall become immediately due and payable, and then and in every such case full power and authority are hereby given to said bank to sell, assign and deliver the whole of said securities or any part thereof or any substitutes therefor or any additions thereto through any stock exchange or broker or at private sale, without either advertisement or notice, the same being hereby expressly waived; or said bank, at its option, may sell the whole or any part of said securities or property at public sale upon five days' notice published in any newspaper printed in the city of Cleveland, at which public sale said bank itself may purchase the same or any part thereof free from any right of redemption on the part of the undersigned, which is hereby expressly waived and released. In case of sale for any cause, after deducting all costs and expenses of every kind, said bank may apply the residue of the proceeds of such sale, as it shall deem proper, toward the payment of any one or more or all of the liabilities of the undersigned to said bank, whether due or not due, returning the overplus, if any, to the undersigned, who agree to be and remain liable to said bank for any and every deficiency after application as aforesaid, upon this and all other of said liabilities; the undersigned hereby authorizing the transfer or assignment of said securities and property to the purchaser thereof.

And.....hereby authorize any attorney-at-law to appear in any court of record in the United States, after the above obligation becomes due and waive the issuing and service of process and confess a judgment against .....in favor of THE FIRST NATIONAL BANK OF or any holder of this note, for the amount then appearing due together with the costs of suit, and thereupon to release all errors and waive all right of appeal and stay of execution.

.....

.....

FIG. 40.—Collateral Note

Syndicate loans are loans extended to a group of men who pool their credit resources, so to speak, in order to secure funds for the financing of some special project in which all are interested.

Participation loans are the reverse of the syndicate loans. They consist of loans made jointly by several banks through the agency of one of them, to one interest. Both law and business prudence provide that no one institution shall loan more than a certain proportion of its capital and surplus to one interest. Excess loans are avoided by this plan which enables banks to finance increases in capital stock or to make other similar loans where large amounts of money are required for short intervals.

Call, demand, temporary, and *overnight loans* are loans which differ from other classes of loans chiefly in the matter of maturity. They are most common to banks in the larger cities, especially those having markets where stocks and bonds are dealt in. They are almost invariably secured by collateral enjoying a ready market, and they constitute the most liquid of bank loans. The time of their payment is optional, both with the bank and the borrower, although ample warning is usually given by either party wishing to terminate the obligation.

Books and Records

The accounting of the loan department is accomplished principally on three books:

1. The discount register.
2. The liability ledger.
3. The maturity tickler.

These books may be known by other names, and their number may be added to in large banks which handle every variety of loan. It will be easier to understand

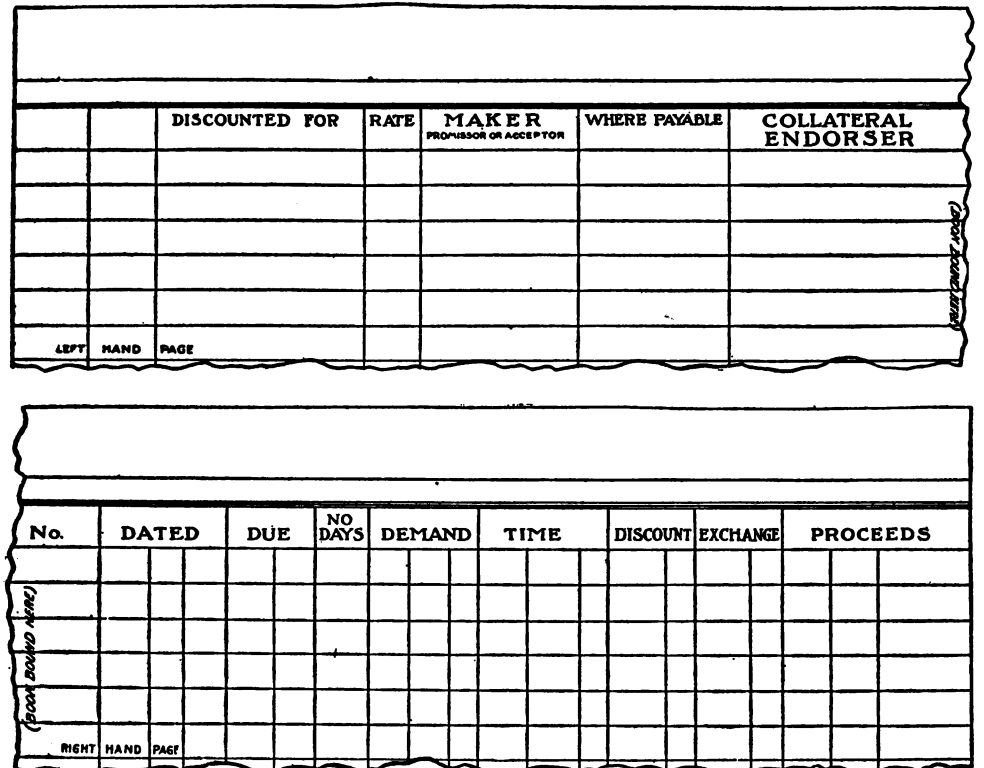


FIG. 41.—Discount Register

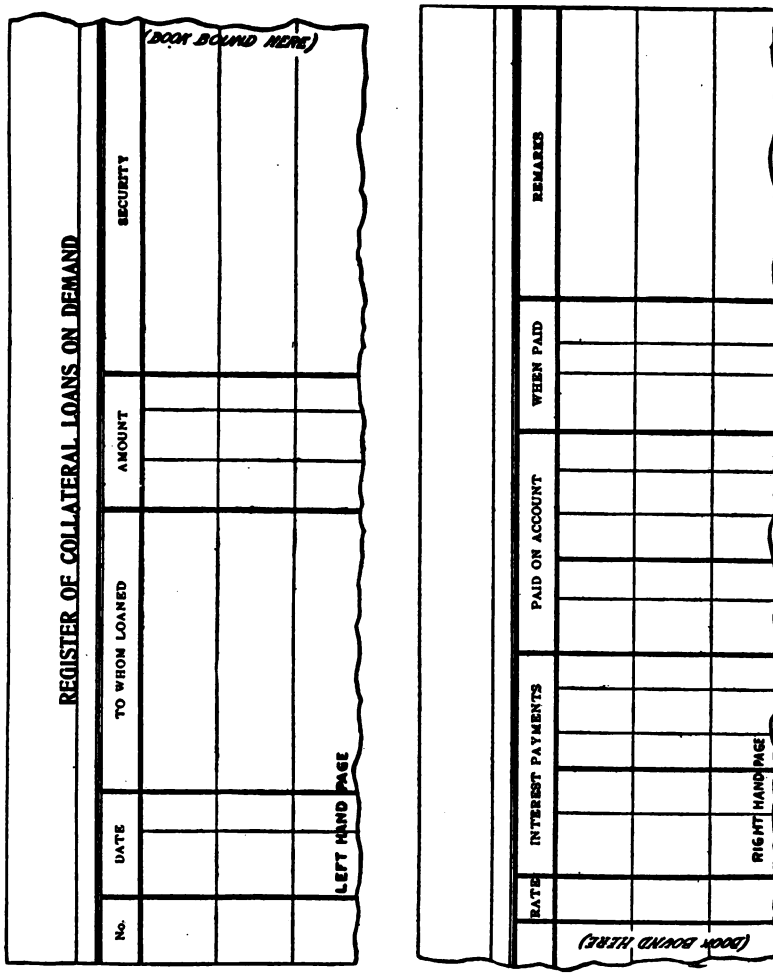
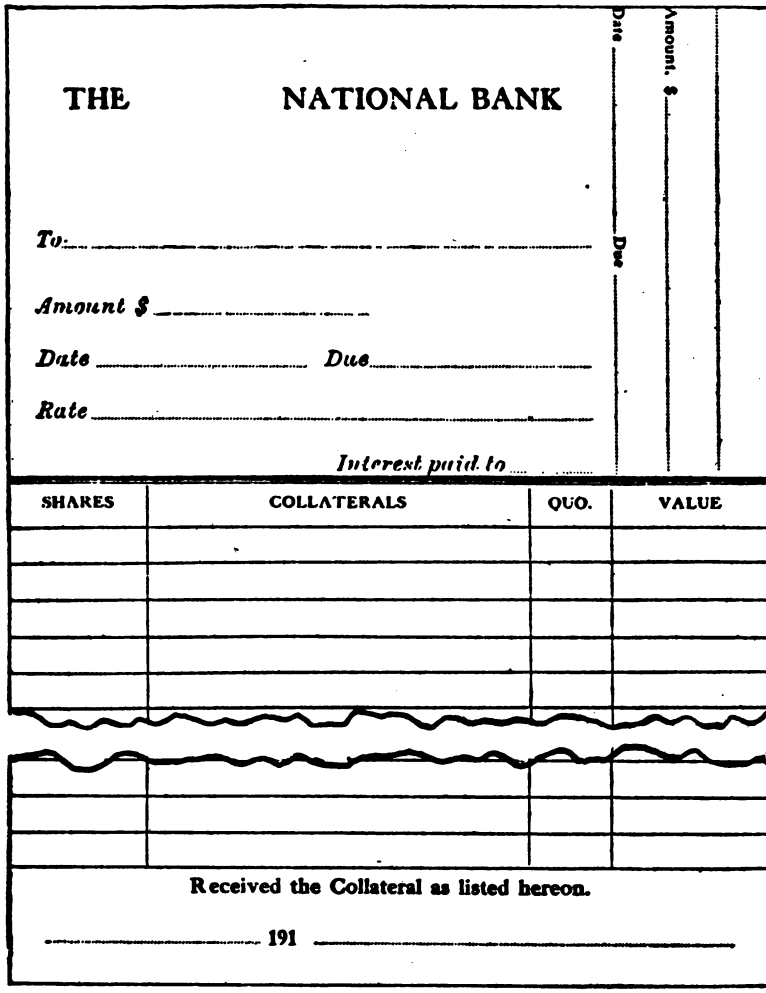


FIG. 42.—Demand Loan Register

the accounting methods of all banks if we confine ourselves first to the three books above mentioned, elaborating in more detail as we proceed.

When a loan is made, assuming that it is a discounted bill on which the interest is figured in advance, the first operation is the calculation of the discount. This


THE NATIONAL BANK

Date

Amount. $

To:

Due

Amount $

Date *Due*

Rate

Interest paid to

SHARES	COLLATERALS	QUO.	VALUE

Received the Collateral as listed hereon.

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FIG. 43.—Collateral Record

may be done by the use of a formula, as we are taught in grammar school, or printed interest tables may be referred to. The day the loan is made is included in the time the note has to run. In some cities, happily from the viewpoint of the borrower, in the minority, the day of maturity is also included, the theory being that the proceeds of the loan are available on the day the loan is made, whereas the borrower is not required to pay until three o'clock on the day it matures.

The note is first entered upon the discount register, the record of each item extending on a single line across both pages of the book under the headings: discounted for, rate, maker, where payable, collateral or indorser, dated, time, due, discount, and proceeds. This record

COLLATERAL SUBSTITUTION RECEIPT

Ohio,_____ 19 __

To THE OHIO NATIONAL BANK

Gentlemen:

Please deliver to the bearer the following securities, receipt of which is hereby acknowledged, pledged as collateral for the payment of my/our loan, dated _____, due_____ amount $_____

(PRESENT MARKET VALUE)

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

Total, $ _____

and accept in lieu thereof, subject to all of the terms and conditions of said loan, the following securities:

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

_____ at _____ $ _____

Total $ _____

_____

SIGNATURE MUST BE OFFICIAL

FIG. 44.—Collateral Substitution Receipt

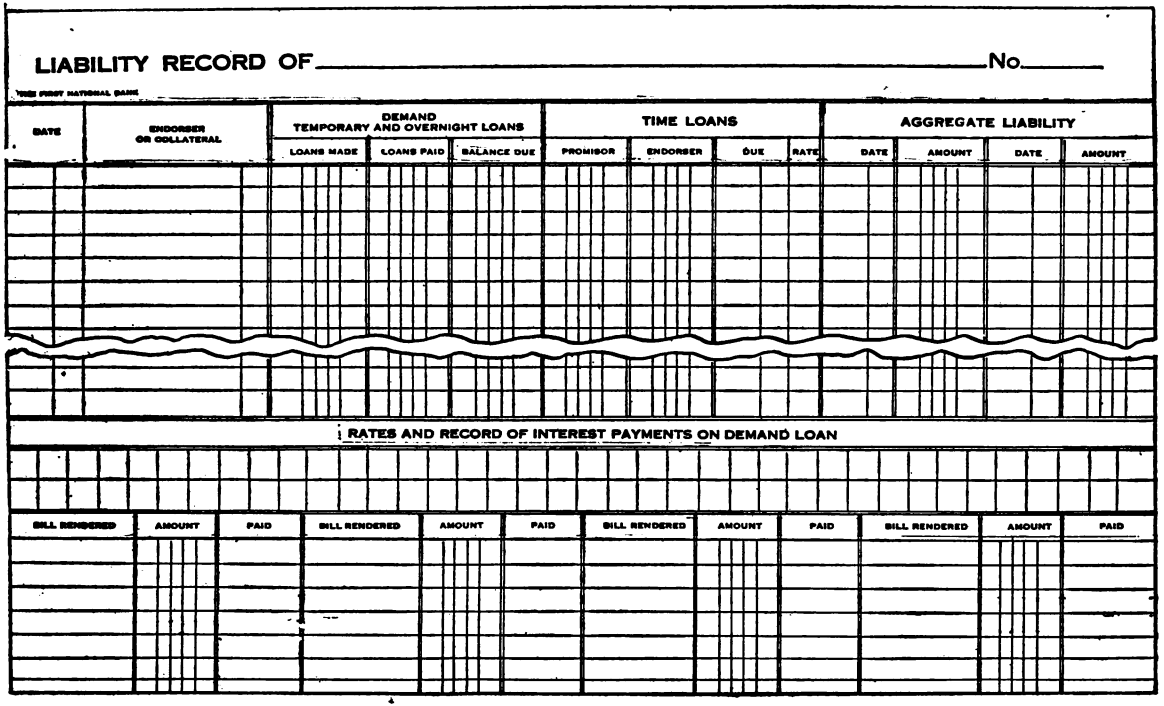


FIG. 45.—Liability Ledger

This is a loose-leaf card ledger sheet with same ruling on reverse side.

may vary in a dozen ways; as, for example, three or more columns may be provided for classification purposes as to demand, time, single name, nature of collateral, etc. (See Figures 41 and 42.)

The record for collateral is conveniently kept on a card as shown in Figure 43, which is used with the envelope in which the collateral is filed. A change in color will serve to distinguish between time and demand records. Collateral substitutions are noted on the card and not the envelope. Figure 44 illustrates a collateral substitution receipt.

The loan is next entered on the liability ledger. As with the individual ledger, each borrower or indorser is given a separate page headed with his name. The record consists of separate columns which are headed: maker, indorser, rate, due rate, liability as borrower on own paper, other paper, liability on paper discounted for others as maker, as indorser. Additional columns may be added for calculating total liability and for debit or credit entries as the liability increases or decreases. Similar to the discount register, the record placed upon the liability ledger varies considerably without any difference in the general style. As loans are paid, they may either be crossed off the liability ledger or be accounted for by debit and credit postings.

The third entry is made on the maturity tickler, a book which is practically a diary of loans listed as to date of maturity. This book may have two or more pages for each day to enable classification of loans as to place payable. After they have been entered upon the tickler, the notes are filed away in "portfolios," each day's maturities in a separate compartment. In order to avoid too cumbersome a division, those falling due at a considerable time after discount may be placed in a single compartment in chronological order to be

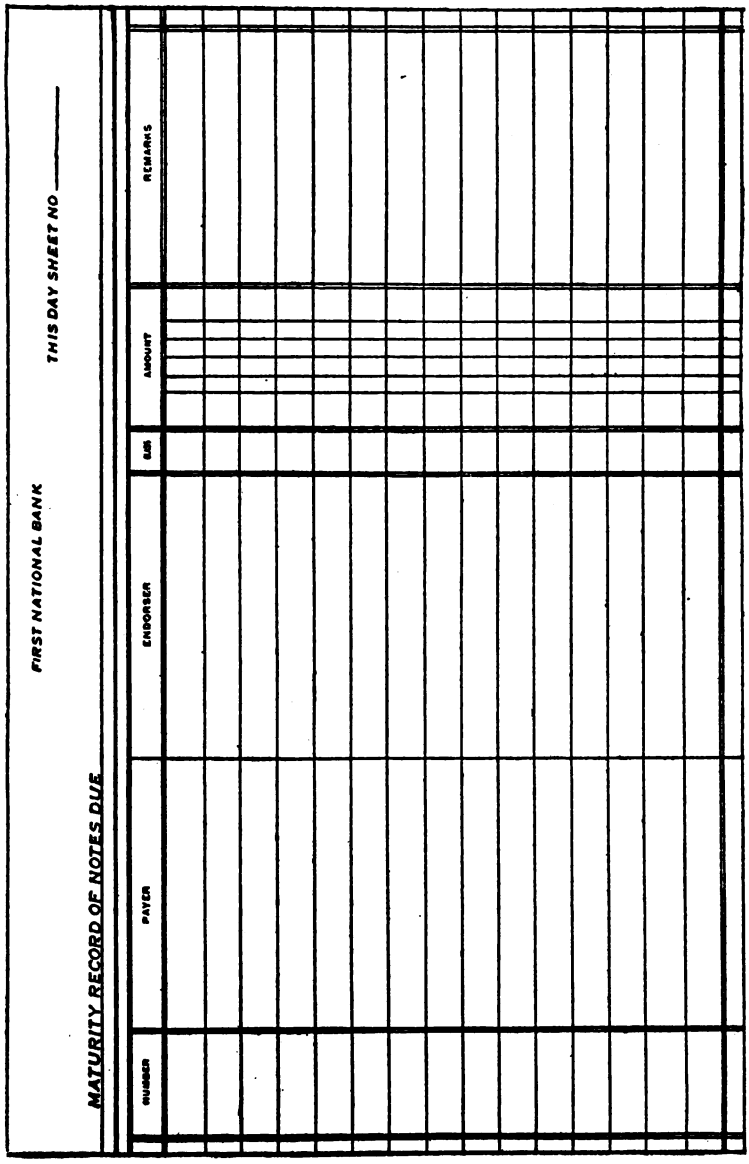


Fig. 46.—Maturity Tickler

assorted into their proper places at a reasonable time before maturity.

Accounting Methods

When a customer secures a loan, the money is made available to him by one of three methods: (1) His account may be credited subject to his check; (2) he may be given a draft or cashier's check; or (3) he may be given the actual currency. If his account is credited, the credit may be passed directly from the loan department to the bookkeeper; or a safer way is to make a charge ticket charging "loans and discounts," which is signed by the officer who authorized the loan, and this ticket is then deposited by the borrower at the receiving teller's window. The charge ticket makes the accounting journey through the receiving teller's records to the general ledger bookkeeper, and the credit is passed similarly to the individual ledger bookkeeper by way of a deposit ticket. If the loan is extended to the borrower in the form of a cashier's check, the item "cashier's checks" is credited and the check is issued.

When loans mature, the city notes are given to the note teller, and those payable in other cities are sent to correspondents a sufficient time in advance to secure proper presentation. The item "loans and discounts" is credited on the general ledger, and corresponding charges are made against whatever accounts the payments appear in. These debits and credits, whether applying to loans made or loans paid, will be more clearly understood when we take up the study of the general ledger.

In addition to the books and records we have mentioned as being common to all banks, there are several other forms used in more or less complication of detail, as, for example, the book in which are entered all notes

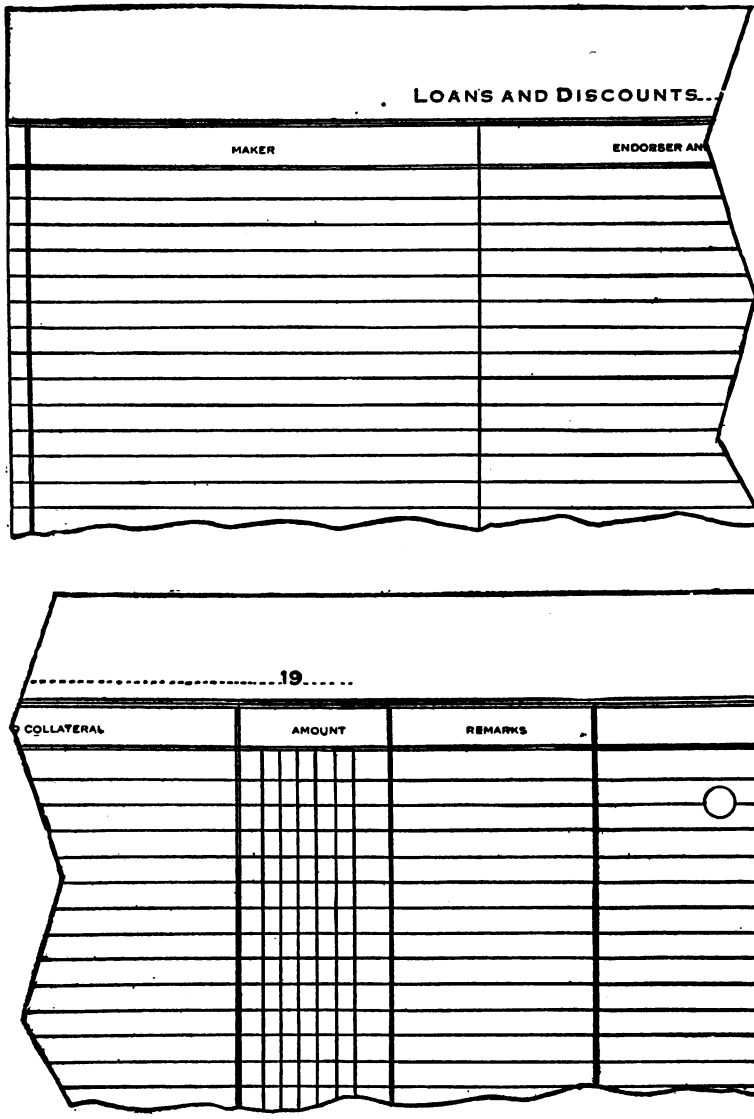


FIG. 47.—Loans and Discounts Book

Statement of all loans made in a single day to be passed on and approved in writing by a loan committee. A rubber stamp imprint may be placed upon the form providing for the signatures of the committee and also of a clerk, teller, or junior officer who certifies that the above is a complete record of all notes presented and approved for discount on that date.

presented for discount. This book is more commonly used by small banks which make a practice of discounting paper once a week on "board day," at which time the board of directors passes upon all loans. The daily statement of loans made is a sort of journal record from which the bookkeeper makes his entries to the general ledger. This book often provides a column for the initials or signature of the officer or officers authorizing the loan. The daily record of loans paid is a book similar to the maturity tickler. Other records are provided for entering interest as it is paid upon demand or call loans.

Many banks employ carbon records for loans and discounts by which all records are made in one operation. The advantages of such systems, however, are limited. The proper handling of loans and discounts is concerned more with official supervision and keenness of judgment than with the amount of clerical work involved; hence the use of carbon can scarcely be recommended, except where notes are discounted in unusual quantities. The forms employed should be such as admit of a ready and comprehensive inspection on the part of either directors or bank examiners, and this purpose is best served by the use of pen-and-ink book or card records.

Collateral Loans

A considerable amount of incidental accounting is required in connection with loans secured by collateral. Stock market collateral is, generally speaking, the most desirable class of security, since it commands a ready market and the price for which it may be disposed of can be readily determined. Collateral of this class is filed away in envelopes to which is attached a card showing the kind and the amount of the contents. Some-

times this record is entered directly upon the envelope, but the card system is preferable, since new cards may be filled out more easily and economically as changes or substitutions are made in the securities. (Compare Figures 43 and 48.)

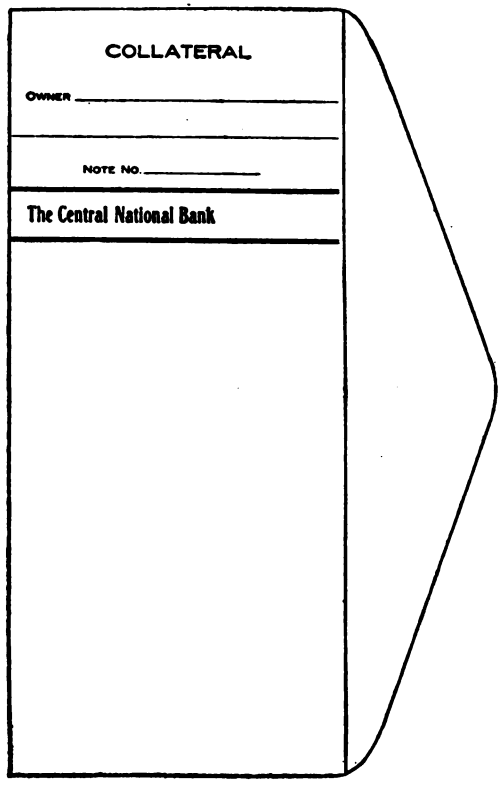


FIG. 48.—Collateral Envelope

The collateral clerk keeps in close touch with stock and bond quotations, and if the market "goes off," he immediately calls for substitutions for the affected securities, or else the bank asks for more collateral. If the bank is not satisfied with the collateral it holds or demands payment of a loan and the borrower is unable either to substitute acceptable security or to make

payment, the bank may "sell him out" by disposing of the collateral at whatever price it will bring, applying the proceeds to the payment of the note. Power of attorney permitting the bank to transfer stock standing in the name of the borrower is always given at the time

Know all Men by these Presents, *THAT*_____

*for value received, have bargained, sold, assigned, and transferred, and by these presents do bargain, sell, assign and transfer unto*_____

*shares of the*_____ Stock *of the*_____

*standing in*_____ *name on the books of the*_____

*and do hereby constitute and appoint*_____

_____ *true and lawful Attorney, irrevocable, for*_____ *and in*_____ *name and stead, but to use, to sell, assign, transfer and set over all or any part of the said Stock, and for that purpose to make and execute all necessary acts of assignment and transfer, and one or more persons to substitute with like full power, hereby ratifying and confirming all that*_____ *said Attorney, or*_____ *substitute or substitutes shall lawfully do by virtue hereof.*

In Witness Whereof,_____ *have hereunto set*_____ *hand and seal the*_____

*day of*_____ *19*____

SEALED AND DELIVERED IN THE PRESENCE OF

FIG. 49.—Irrevocable Stock Power

the loan is made. Figure 49 illustrates an irrevocable stock power and Figure 50 a power of attorney for the transfer of registered bonds.

THE CREDIT DEPARTMENT

Banking, more than any other business, is a vocation beset with risks. Unfortunately for the banker, there is no exact method he may follow whereby he can determine in advance which loans are certain to be paid, which may require an extension of time, and which may be absolute losses. There was a time when there might have been some truth in the saying, "The best banker

is he who is the best guesser." But the guessing is reduced to a minimum in the modern bank, hard experience and scientific research having proved that there are characteristics which distinguish the safe from the unsafe risks in loaning money.

Know all Men by these Presents, THAT,_____

_____

for value received, have bargained, sold, assigned and transferred, and by these presents do bargain, sell, assign and transfer unto_____

_____

_____ Registered Bonds of the_____ Mortgage Loan of the_____ Company, Number_____ for _____ dollars each, standing in the name of_____ _____ on the books of the said Company, and do hereby constitute and appoint_____ true and lawful Attorney, irrevocable, for_____ and in_____ name and stead, but to the use of the above-named assignee, to sell, assign, transfer and set over said bonds, and for that purpose to make and execute all necessary acts of assignment and transfer, and one or more persons to substitute with like full power, hereby ratifying and confirming all that_____ said Attorney, or_____ substitute or substitutes shall lawfully do by virtue hereof.

In Witness Whereof,_____ have hereunto set_____ hand and seal the _____ day of_____ 191

SEALED AND DELIVERED IN THE PRESENCE OF

_____

_____

_____

SIGNATURE GUARANTEED

FIG. 50.—Power of Attorney to Transfer Registered Bonds

A farmer who has studied scientific agriculture, who knows the chemical value and effect of fertilizers, who uses modern machinery, and who keeps books will have fewer crop failures than his neighbor who plants his fields according to "signs" and uses an old almanac for his textbook. Both farmers are subject to the vagaries of the weather, but the scientific planter is in the better position to recoup his losses. So it is among financiers.

The banker has learned that it is necessary for him to know not only his own business, but the business of the borrower as well, if he is to loan money safely. This knowledge, which is defined in a broad sense as "credit information," may be carried in the banker's head if his borrowers are friends and neighbors, as is the case in a small country bank; or if the bank is located in a

Organized 1803

THE PHILADELPHIA NATIONAL BANK

CAPITAL $1,500,000 SURPLUS $4,000,000

Philadelphia, May 17, 1917

Mr. R. C. Fillmore, Vice-President
Fourth National Bank
Albany, N. Y.

CONFIDENTIAL INFORMATION furnished at your request and without responsibility on the part of this bank or its officers.

Dear Sir:

Your letter of the 15th inst. is at hand.

The Sims-Brewster Hardware Company of this city have a well-established business and under date of December 31, 1916, made a statement showing, according to our analysis, quick assets of $1,810,000 to pay current liabilities of $890,000. They are customers of ours, and when called upon, we are glad to loan them in substantial amounts, but they are using only a small portion of their line at present, and until recently had been off our books for several months.

There was a change in the management some few months ago, J. R. Hess, former president, having retired and disposed of his interest. The Brewster family now either own the majority of the stock, or at least with certain others very close to them, control it, and we feel they are fully competent to manage the business successfully. The profits of the business for 1916 were unusually good, and in our opinion, the company's note affords a safe banking investment.

Yours very truly,

.....
Assistant Cashier

FIG. 51.—Typical Letter in Reply to Request for Credit Information

larger town or city, complete printed and written records are kept covering the essential facts concerning every present or prospective customer. The wise business man keeps no secrets from his doctor, his lawyer, and his banker.

The extension of credit is not peculiarly a banking function. Every large manufacturer, jobber, or retailer has his credit man or credit department. The methods used by banks in obtaining and filing credit information are practically the same as those employed in other commercial lines. In fact, the best credit men employed in large banks to-day have secured their training, as a rule, outside the banking profession. Well-written books are to be had devoted entirely to credit topics, just as textbooks covering banking are now available. Discussing the subject from its practical application to bank work, we may refer briefly to the functions of the credit department.

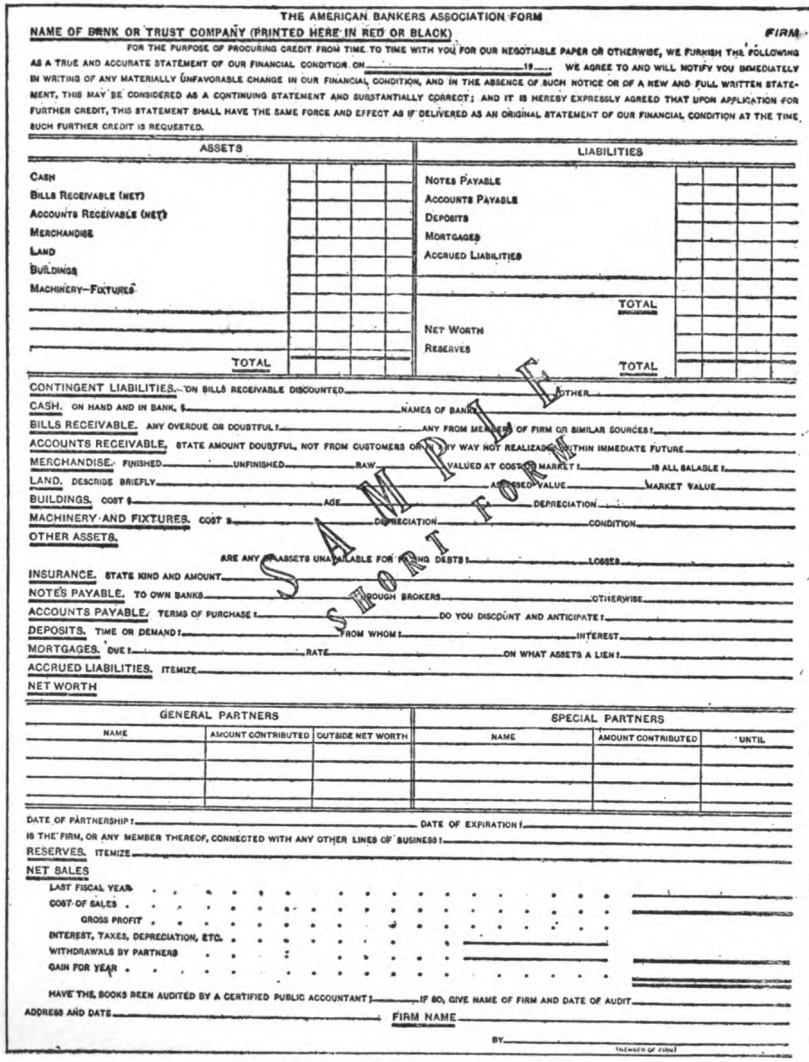
The work of the credit department may be classified in three divisions:

1. Investigation.
2. Analysis.
3. Filing.

The sources of information are unlimited, but there are certain methods followed which produce practically all the data to be found in the files of the average or typical credit department.

INVESTIGATION

The ordinary investigation begins with a consultation between the borrower and his own bankers, which may take place either at the bank or preferably in the office or factory of the customer. The borrower's statement is gone over carefully, and each item represented therein



THE AMERICAN BANKERS ASSOCIATION FORM

NAME OF BANK OR TRUST COMPANY (PRINTED HERE IN RED OR BLACK) FIRM

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON _____ 19____. WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH		NOTES PAYABLE	
BILLS RECEIVABLE (NET)		ACCOUNTS PAYABLE	
ACCOUNTS RECEIVABLE (NET)		DEPOSITS	
MERCHANDISE		MORTGAGES	
LAND		ACCRUED LIABILITIES	
BUILDINGS			
MACHINERY—FIXTURES		TOTAL	
		NET WORTH	
		RESERVES	
TOTAL		TOTAL	

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED _____ OTHER _____

CASH. ON HAND AND IN BANK, $ _____ NAMES OF BANKS _____

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? _____ ANY FROM MEMBERS OF FIRM OR SIMILAR SOURCES? _____

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE _____

MERCHANDISE. FINISHED _____ UNFINISHED _____ RAW _____ VALUED AT COST OR MARKET? _____ IS ALL SALABLE? _____

LAND. DESCRIBE BRIEFLY _____ ASSESSED VALUE _____ MARKET VALUE _____

BUILDINGS. COST $ _____ AGE _____ DEPRECIATION _____

MACHINERY AND FIXTURES. COST $ _____ DEPRECIATION _____ CONDITION _____

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? _____ LOSSES _____

INSURANCE. STATE KIND AND AMOUNT _____

NOTES PAYABLE. TO OWN BANKS _____ THROUGH BROKERS _____ OTHERWISE _____

ACCOUNTS PAYABLE. TERMS OF PURCHASE? _____ DO YOU DISCOUNT AND ANTICIPATE? _____

DEPOSITS. TIME OR DEMAND? _____ FROM WHOM? _____ INTEREST _____

MORTGAGES. DUE? _____ RATE _____ ON WHAT ASSETS A LIEN? _____

ACCRUED LIABILITIES. ITEMIZE _____

NET WORTH

GENERAL PARTNERS			SPECIAL PARTNERS		
NAME	AMOUNT CONTRIBUTED	OUTSIDE NET WORTH	NAME	AMOUNT CONTRIBUTED	UNTIL

DATE OF PARTNERSHIP? _____ DATE OF EXPIRATION? _____

IS THE FIRM, OR ANY MEMBER THEREOF, CONNECTED WITH ANY OTHER LINES OF BUSINESS? _____

RESERVES. ITEMIZE _____

NET SALES

LAST FISCAL YEAR . . . . . _____

COST OF SALES . . . . . _____

GROSS PROFIT . . . . . _____

INTEREST, TAXES, DEPRECIATION, ETC. . . . . _____

WITHDRAWALS BY PARTNERS . . . . . _____

GAIN FOR YEAR . . . . . _____

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? _____ IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT _____

ADDRESS AND DATE _____ FIRM NAME _____

BY _____ (MEMBER OF FIRM)

SAMPLE SHORT FORM

FIG. 52.—Customer's Statement (Short Form)
(Firm.)

THE AMERICAN BANKERS ASSOCIATION FORM

NAME OF BANK OR TRUST COMPANY (PRINTED HERE IN RED OR BLACK) CORPORATION

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON _____ 19___; WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH		NOTES PAYABLE	
BILLS RECEIVABLE (NET)		ACCOUNTS PAYABLE	
ACCOUNTS RECEIVABLE (NET)		DEPOSITS	
MERCHANDISE		BONDED DEBT	
LAND		MORTGAGES	
BUILDINGS		ACCRUED LIABILITIES	
MACHINERY—FIXTURES		TOTAL	
		CAPITAL	
		SURPLUS—PROFITS	
		RESERVES	
TOTAL		TOTAL	

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED _____ OTHER _____

CASH. ON HAND AND IN BANK, $ _____ NAMES OF BANKS _____

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? _____ ANY FROM OFFICERS, DIRECTORS, SUB-COMPANIES OR SIMILAR SOURCES? _____

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE _____

MERCHANDISE. FINISHED _____ UNFINISHED _____ RAW _____ VALUED AT COST OR MARKET? _____ IS ALL SALABLE? _____

LAND. DESCRIBE BRIEFLY _____ ASSESSED VALUE _____ MARKET VALUE _____

BUILDINGS. COST $ _____ AGE _____ DEPRECIATION _____

MACHINERY AND FIXTURES. COST $ _____ DEPRECIATION _____ CONDITION _____

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? _____ LOSSES _____

INSURANCE. STATE KIND AND AMOUNT _____

NOTES PAYABLE. TO OWN BANKS _____ THROUGH BROKERS _____ OTHERWISE _____

ACCOUNTS PAYABLE. TERMS OF PURCHASE? _____ DO YOU DISCOUNT AND ANTICIPATE? _____

DEPOSITS. TIME OR DEMAND? _____ FROM WHOM? _____ INTEREST _____

BONDED DEBT AND MORTGAGES. DUE? _____ RATE _____ ON WHAT ASSETS A LIEN? _____

ACCRUED LIABILITIES. ITEMIZE _____

CAPITAL. PREFERRED AUTHORIZED $ _____ ISSUED $ _____ DIVIDENDS _____ COMMON AUTHORIZED $ _____ ISSUED $ _____ DIVIDENDS _____

RESERVES. ITEMIZE _____

NET SALES

LAST FISCAL YEAR		
COST OF SALES		
GROSS PROFIT		
INTEREST, TAXES, DEPRECIATION, ETC.		
DIVIDENDS PAID		
SURPLUS FOR YEAR		

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? _____ IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT _____

CORPORATE NAME _____

DATE SIGNED _____ BY _____ (STATE OFFICER'S TITLE)

OFFICE ADDRESS _____ NATURE OF BUSINESS _____

LOCATION OF PLANTS AND BRANCH OFFICES _____

OFFICERS	DIRECTORS
_____ PRESIDENT	_____
_____ VICE-PRESIDENT	_____
_____ TREASURER	_____
_____ SECRETARY	_____

SAMPLE
SHORT FORM

FIG. 52.—Continued
(Corporation.)

THE AMERICAN BANKERS ASSOCIATION FORM

NAME OF BANK OR TRUST COMPANY (PRINTED HERE IN RED OR BLACK) CORPORATION

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON _____ 19__. WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH		NOTES PAYABLE	
BILLS RECEIVABLE (NET)		ACCOUNTS PAYABLE	
ACCOUNTS RECEIVABLE (NET)		DEPOSITS	
MERCHANDISE		BONDED DEBT	
LAND		MORTGAGES	
BUILDINGS		ACCRUED LIABILITIES	
MACHINERY—FIXTURES		TOTAL	
		CAPITAL	
		SURPLUS—PROFITS	
		RESERVES	
TOTAL		TOTAL	

CONTINGENT LIABILITIES OF CORPORATION?_____ OF ENDORSERS?_____

CASH

ON HAND AND AVAILABLE_____ IN BANKS_____ DOES THIS ITEM INCLUDE CASH OF SELLING HOUSES OR BRANCHES?_____

BILLS RECEIVABLE

ANY DUE FROM OFFICERS, DIRECTORS OR EMPLOYEES?_____ WERE THOSE RECEIVED FOR MERCHANDISE SALES GIVEN AT DATE OF SALE, OR DO THEY REPRESENT OPEN ACCOUNTS SETTLED BY NOTE?_____ ARE THERE ANY WHICH YOU PROBABLY WILL NOT BE ABLE TO COLLECT?_____ ARE ANY UNDER DISCOUNT OR PLEDGED AND NOT INCLUDED IN THIS ITEM?_____ ARE ANY PAST DUE?_____ HAVE ANY BEEN REGULARLY EXTENDED OR RENEWED?_____ CONTINUOUSLY RENEWED?_____ HOW MUCH DUE FROM SELLING HOUSES, BRANCHES, ALLIED OR CONTROLLED COMPANIES?_____

ACCOUNTS RECEIVABLE

ARE ALL DUE FROM CUSTOMERS?_____ HAVE ALL DOUBTFUL ACCOUNTS BEEN ELIMINATED; IN OTHER WORDS, IS THIS ITEM, TO THE BEST OF YOUR KNOWLEDGE, GOOD AND COLLECTIBLE?_____ ANY ACCOUNTS PLEDGED?_____ WHAT PROPORTION OVERDUE?_____ HOW MUCH DUE FROM SELLING HOUSES, BRANCHES, ALLIED OR CONTROLLED COMPANIES?_____

WHAT ARE YOUR TERMS OF SALE?_____ GIVE NAMES OF A FEW LEADING CONCERNS TO WHICH YOU SELL_____

MERCHANDISE

FINISHED_____ UNFINISHED_____ RAW_____ VALUED AT COST, OR MARKET PRICE AT DATE OF INVENTORY, OR ON WHAT BASIS?_____ ANY HYPOTHECATED?_____ IS STOCK FRESH AND SALABLE THROUGHOUT?_____ ANY HELD UNDER TRUST RECEIPT?_____ UNDER CONSIGNMENT?_____ INVENTORY TAKEN BY WHOM?_____

LAND, SEE OVER

BUILDINGS

WELL APPOINTED AND MAINTAINED?_____ PROVISION FOR DEPRECIATION?_____

MACHINERY—FIXTURES

IS EQUIPMENT MODERN?_____ PROVISION FOR DEPRECIATION?_____ ANYTHING WITHOUT SPECIAL VALUE AND NOT NOW IN USE INCLUDED IN THIS ITEM?_____

PLACE HERE ANY COMMENTS ON MISCELLANEOUS ASSETS

TIME OF YEAR RECEIVABLES NORMALLY MAXIMUM?_____ MINIMUM?_____ TIME OF YEAR MERCHANDISE NORMALLY MAXIMUM?_____ MINIMUM?_____ IS EVERY ITEM OF ASSETS ESTIMATED ON A CONSERVATIVE BASIS?_____ ARE ANY OF THE ASSETS, ABOVE DESCRIBED, UNAVAILABLE FOR PAYING DEBTS?_____

NOTES PAYABLE

TO OUR BANKS?_____ MAKE YOUR BANKS AND LINE WITH EACH_____

WHAT TIME OF YEAR DO YOU NORMALLY BORROW OF YOUR BANKS?_____ TO BROKERS?_____ HOW MUCH THROUGH EACH BROKER, IF MORE THAN ONE?_____ DO YOU BORROW CONTINUOUSLY IN OPEN MARKET?_____

FOR MERCHANDISE?_____ OTHERWISE?_____ DO YOU EVER BORROW ON COLLATERAL?_____

DO YOUR SELLING OFFICES OR BRANCHES BORROW LOCALLY?_____ IF SO, IS AMOUNT INCLUDED IN TOTAL BILLS PAYABLE?_____

IS THERE ANYTHING IN YOUR BY-LAWS OR CHARTER LIMITING YOUR BORROWING CAPACITY?_____

IS THERE ANYTHING IN THE LAWS OF YOUR STATE WHICH LIMITS THE BORROWING CAPACITY OF A CORPORATION?_____

SAMPLE LONG FORM

FIG. 53.—Customer's Statement (Long Form)

ACCOUNTS PAYABLE

TERMS OF PURCHASE?_____ DO YOU DISCOUNT AND ANTICIPATE?_____ NAME A FEW CONCERNS FROM WHOM YOU PURCHASE LARGELY_____

DEPOSITS

ON TIME OR DEMAND?_____ FROM WHOM?_____ %_____

BONDED DEBT

DUE?_____ WHAT RATE?_____ ON WHAT ASSETS A LIEN?_____ UNDERWRITTEN BY WHOM?_____ TRUSTEE OF MORTGAGE?_____ PROVISION FOR RETIREMENT?_____ BY WHOM HELD CHIEFLY?_____ ANY IN TREASURY?_____

MORTGAGES—OTHER THAN THOSE SECURING BONDS_____ SEE BELOW UNDER LAND

ACCRUED LIABILITIES

ITEMIZE_____

PLACE HERE ANY COMMENTS ON MISCELLANEOUS LIABILITIES

TIME OF YEAR CURRENT LIABILITIES NORMALLY MAXIMUM?_____ MINIMUM?_____

CAPITAL

PREFERRED AUTHORIZED?_____ COMMON AUTHORIZED?_____ TOTAL_____ PREFERRED ISSUED?_____ COMMON ISSUED?_____ TOTAL_____ ANY IN TREASURY?_____ DIVIDENDS: PREFERRED?_____ COMMON?_____ ORGANIZED UNDER LAWS OF?_____ WHEN?_____ EXPIRATION OF CHARTER?_____ ARE YOUR SELLING HOUSES OR BRANCHES SEPARATELY INCORPORATED?_____

SURPLUS—PROFITS

RESERVES

ITEMIZE_____

SALES

(NET) FOR LAST FISCAL YEAR?_____ DOES THIS INCLUDE SALES OF OR TO SELLING HOUSES AND BRANCHES?_____ DOES IT INCLUDE SALES BETWEEN DEPARTMENTS, AS FROM WHOLESALE TO RETAIL?_____ LOSSES FOR LAST FISCAL YEAR?_____

INSURANCE

ON MERCHANDISE?_____ ON PLANT?_____ CREDIT?_____ LIABILITY?_____

ENDORSERS

NET WORTH OF EACH ENDORSER OUTSIDE OF INTEREST IN THIS BUSINESS?_____

DO THEY ENDORSE OTHER PAPER THAN THIS?_____

GROSS PROFITS ON SALES FOR LAST FISCAL YEAR				
GROSS PROFITS FROM OTHER SOURCES				
COST OF ADMINISTRATION, INCLUDING INTEREST, TAXES, INSURANCE, BAD DEBTS, REPAIRS, MAINTENANCE, DEPRECIATION, AND ALL OTHER EXPENSES OF EVERY KIND				
NET PROFIT				
LESS DIVIDENDS PAID				
SURPLUS FOR YEAR				

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT?_____ IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT_____

LAND

DESCRIPTION	LOCATION	ASSESSED VALUE	APPRAISED VALUE	MORTGAGES	MORTGAGEE	PER CENT.	EQUITY

IS TITLE IN CORPORATE NAME?_____ BY WHOM APPRAISED?_____ WHEN?_____

CORPORATE NAME_____

BY_____ (OFFICER'S TITLE MUST BE GIVEN)

DATE SIGNED_____

OFFICE ADDRESS_____ BRANCH OFFICES_____

LOCATION OF PLANT OR PLANTS_____

DESCRIBE NATURE OF BUSINESS_____

OFFICERS

_____ PRESIDENT

_____ VICE-PRESIDENT.

_____ TREASURER

_____ SECRETARY

BOARD OF DIRECTORS

_____ CHAIRMAN

FIG. 53.—Continued

is subjected to careful inquiry to determine whether the prospective customer of the bank and the figures he submits can be relied upon. In addition to this first-hand information, letters of inquiry may be addressed to the "trade" to determine more accurately the business habits of the borrower. Newspaper clippings and the reports of mercantile agencies complete the usual sources of information. Banks keep in touch with each other as to their experiences with borrowers, correspondence of this nature being carefully guarded in the strictest confidence. Forms of customers' statements are shown in Figures 52 and 53.

ANALYSIS

All information of whatever nature is carefully analyzed. The starting point is the annual statement; the various items are "checked up" and rearranged from a credit viewpoint, the principal object being to determine the ability of the borrower to liquidate his current liabilities readily. A form which provides for a comparison of statements is kept up to date, and from this data the "turnover," earnings, and general progress of the business are calculated. The capacity to analyze statements accurately and intelligently calls for a keen business mind, and it is this ability which marks the successful credit man. As has been stated, this is the work of a specialist. Except in very small institutions, the officer who looks after the credit work of the bank as a rule devotes his entire time to this branch of the business. Country bankers depend upon these trained specialists among their larger city correspondents to keep them supplied with information concerning borrowers to whom they may loan through purchases of "commercial paper." Typical credit analysis forms are illustrated in Figures 54, 55, and 56.

NAME OF CUSTOMER				OFFICERS:																	
DATE OF STATEMENT																					
QUICK ASSETS Cash,																					
Acc'ts and Bills Receivable																					
Mdse.,																					
TOTAL QUICK ASSETS,																					
Real Estate, Etc.,																					
Plant,																					
TOTAL ASSETS																					
LIABILITIES Bills Payable,																					
Accounts, Payable																					
TOTAL CURRENT LIABILITIES,																					
Capital Stock,																					
Surplus,																					
Profits,																					
TOTAL LIABILITIES																					
TOTAL QUICK ASSETS,																					
TOTAL CURRENT LIABILITIES,																					
NET QUICK ASSETS																					
Other Assets,																					
NET WORTH,																					
Annual Sales,																					
Bradstreet Rating,																					
Dun Rating,																					

Endorsers of Paper and Responsibility,			1908	1909	1910	1911	1912
		Max. Amt. Borrowed					
		Min. Amt. Borrowed					
		Own Paper					
Agreed Line of Credit,		End. Paper					
Broker Handling Paper,							

FIG. 54.—Credit Analysis Form (Mercantile)

LOCATION OF BANK	NAME	Date Account Opened
President, Vice-Pres., Vice-Pres.,	Cashier, Ass't Cashier, Ass't Cashier,	Date Account Closed

ASSETS	1910	1911	1912	1913	1914
Loans and Discounts,					
Overdrafts,					
Real Estate and Fixtures,					
Stock and Bonds,					
Cash and Exchange,					
LIABILITIES					
Capital,					
Surplus and Profits,					
Deposits,					
Bills Payable,					

Maximum Amount of Money Borrowed	1910	1911	1912	1913	1914

AVERAGE BALANCES

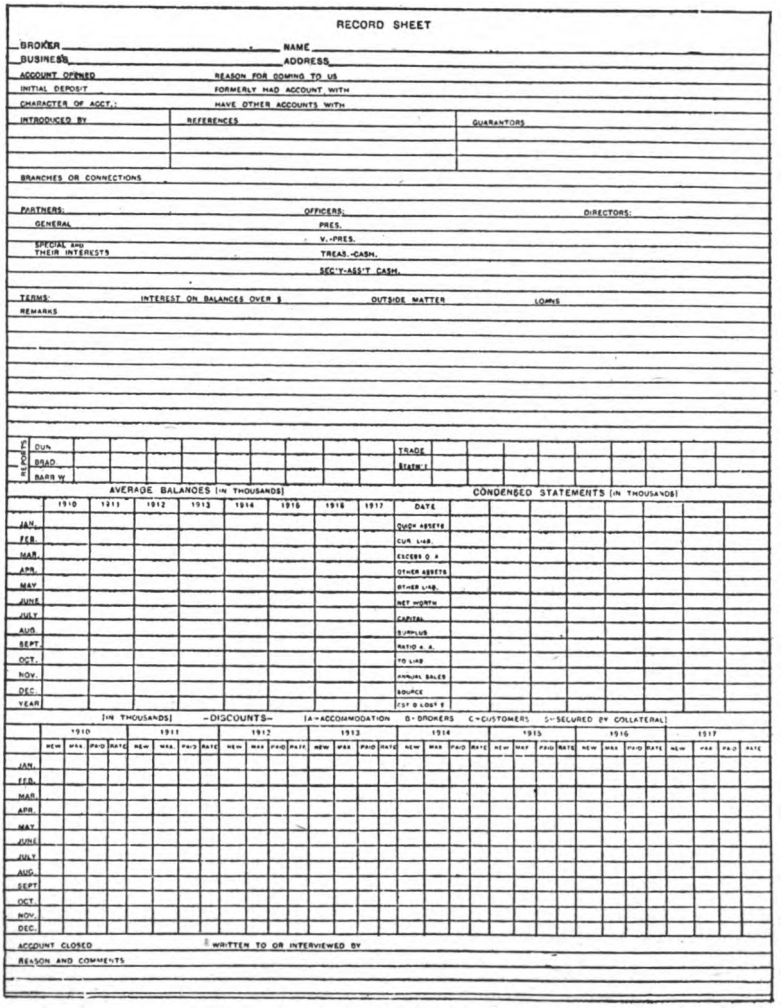
	JAN	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT.	NOV.	DEC.	Average for Year
1910													
1911													
1912													
1913													
1914													

CORRESPONDENTS:

Agreement as to handling business _____

They remitted at _____

FIG. 55.—Credit Analysis Form (Bank)



RECORD SHEET

BROKER _____ NAME _____

BUSINESS _____ ADDRESS _____

ACCOUNT OPENED _____ REASON FOR COMING TO US _____

INITIAL DEPOSIT _____ FORMERLY HAD ACCOUNT WITH _____

CHARACTER OF ACCT.: _____ HAVE OTHER ACCOUNTS WITH _____

INTRODUCED BY _____ REFERENCES _____ GUARANTORS _____

BRANCHES OR CONNECTIONS _____

PARTNERS: _____ OFFICERS: _____ DIRECTORS: _____

GENERAL _____ PRES. _____

SPECIAL AND THEIR INTERESTS _____ V.-PRES. _____

TREAS.-CASH. _____

SEC'Y-ASS'T CASH. _____

TERMS: _____ INTEREST ON BALANCES OVER $ _____ OUTSIDE MATTER _____ LOANS _____

REMARKS _____

REPORTS: DUN _____ BRAD. _____ BARR W. _____ TRADE _____ STATM'T _____

AVERAGE BALANCES (IN THOUSANDS)

	1910	1911	1912	1913	1914	1915	1916	1917
JAN.								
FEB.								
MAR.								
APR.								
MAY								
JUNE								
JULY								
AUG.								
SEPT.								
OCT.								
NOV.								
DEC.								
YEAR								

CONDENSED STATEMENTS (IN THOUSANDS)

DATE								
QUICK ASSETS								
CUR. LIAB.								
EXCESS Q. A.								
OTHER ASSETS								
OTHER LIAB.								
NET WORTH								
CAPITAL								
SURPLUS								
RATIO A. A.								
TO LIAB.								
ANNUAL SALES								
SOURCE								
EST'D LOSS $								

(IN THOUSANDS) —DISCOUNTS— (A=ACCOMMODATION B=BROKERS C=CUSTOMERS S=SECURED BY COLLATERAL)

	1910				1911				1912				1913				1914				1915				1916				1917			
	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE	NEW	MAX.	PAID	RATE
JAN.																																
FEB.																																
MAR.																																
APR.																																
MAY																																
JUNE																																
JULY																																
AUG.																																
SEPT.																																
OCT.																																
NOV.																																
DEC.																																

ACCOUNT CLOSED _____ WRITTEN TO OR INTERVIEWED BY _____

REASON AND COMMENTS _____

FIG. 56.—Credit Analysis Form (Broker)

FILING

Credit information is filed away in heavy manila folders in properly indexed filing cases. The data are kept in chronological order with the comparative statement sheet on top. Letters, inquiries, clippings, reports—all information pertaining to the subject is carefully preserved. It is not uncommon to find a record of the family connections and business experiences of various members of the firm included with other data. In fact, it would be possible to compile a complete history of an organization from the files of a well-informed and systematically conducted credit department. The detail work in a large bank is looked after by a corps of investigators, stenographers, and filing clerks under the direction of one or more assistant cashiers, the entire department being under the supervision of a vice president, who in most cases has received his credit training outside the bank. The judgment of such an officer is less likely to be narrow and biased, since his experience gives him both the banker's and the business man's point of view.

Commercial Paper

Large concerns in good credit standing are able to enjoy the benefit of the best loaning rate for money by placing their loans through note brokers. Money is advanced to the borrowers by the brokers, who then "sell" the notes through traveling representatives to banks having a surplus of loanable funds. The brokers are located in the larger cities, and as a rule are well equipped both in men and in capital to enable them to conduct well-organized credit departments of their own. Banks interested are furnished with statements and full information concerning the standing of the open-market borrowers or "names," as they are called in banking

parlance. The notes are bought "on option," which permits the purchasing bank to check up the paper before making the final purchase. Commercial paper bought in the open market in this way is, as a rule, a more liquid asset than loans to the bank's own customers, since there is no business obligation on the part of the bank to renew at the time of maturity.

Interest Rates

A word as to the conditions which influence the average bank in discriminating between the various kinds of loans previously described as to interest rates may be added in conclusion. It is not unusual to find institutions, especially in the sparsely settled country districts, which charge the full legal rate on all loans at all times. It must be borne in mind, however, that such rates do not represent true interest. There are numerous contingent expenses incidental to the loaning of money which must be reckoned with. For example, there is the matter of preliminary credit investigation, without which a dangerous degree of losses would be incurred. It has been estimated, by competent authorities, that small loans without security to salaried people, such as are made by certain classes of private banks, cannot be profitably made at a lower average rate than 10 per cent. A moment's reflection will convince any unprejudiced person that this must be so. The interest on $50 for one month at 6 per cent is 25 cents. Yet it would be impossible to make loans of this amount for such short periods at a profit. There is just as much accounting expense in stationery, clerk hire, and other overhead fixed costs in loaning $50 as is entailed in making a loan of $50,000, whereas the cost of credit investigation is often relatively much greater, since the channels of information are not so readily available.

Among large banks employing their funds in different

kinds of loans, the rate of interest will vary considerably. High risks always require high rates, a part of the interest charge representing insurance. Loans secured by good collateral enjoy low rates, since the risk of loss is negligible. Long-time loans are made at higher rates than short-time obligations, the risk being greater not only because the loan is subject to a greater period of business risks which the future may have in store, but also because money tied up for long periods cannot be "turned" so quickly as short-time loans. Call or demand loans secured by gilt-edged collateral yield the lowest interest return. These considerations govern the banker in his practical daily operations, and they are referred to here entirely aside from the broader economic conditions which affect the value of money in the open markets of the world.

TEST QUESTIONS

1. Classify the loans of a bank.
2. Why is the security of a loan of more importance than the interest rate?
3. What is meant by the term "self-liquidating"? To what class of loans does it apply? Why is this class of loans important under the Federal Reserve Act?
4. What are the various kinds of securities that are usually designated as collateral?
5. What is a syndicate loan? A participation loan?
6. What are the books and records of the discount department?
7. When a loan is made by a bank, what three methods may be used to disperse the proceeds?
8. What are the three duties of the credit department? Describe each duty briefly.
9. What is the relationship that exists between the high interest rate and the character of the loan made?

CHAPTER VIII

INDIVIDUAL LEDGERS

Kinds of Deposits

Bank deposits are subject to classification both as to the nature of the depositor and as to the contract made by the bank in accepting the deposit. The first division is due to a requirement of the Comptroller of the Currency which makes it necessary for the bank to distinguish between deposits due to other banks and deposits due to all others. The latter are designated by the rather misleading term, "individual deposits." They may be funds deposited by individuals, but more often they will consist of deposits belonging to firms, corporations, municipalities, or any other private or public organization. An exception is the deposits of the government, which are carried on the books as "U. S. deposits" or "postal-savings deposits." These are listed separately because of the fact that banks holding such deposits must put up bonds to secure them. What may be described as classification according to contract applies more particularly to the individual deposits. The largest division is that of deposits subject to check, and the term "individual deposits" is generally understood to apply to such deposits.

There are also individual time deposits which, in the language of the Federal Reserve Act, "shall comprise all deposits payable after thirty days, and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment."

Since the time deposits are not subject to withdrawal without notice, the bank can invest them in relatively slow assets, and hence the rate of reserve required to be held against them is much less, 5 per cent being the percentage fixed by the Federal Reserve Act as compared with 12 to 18 per cent for deposits subject to check.

Another class of individual deposits is savings deposits, which are like, if not identical with, time deposits.

Still another form is the certificate of deposit, which is a negotiable receipt for a special deposit left with the bank. Such deposits are never subject to check. The money is paid by the bank upon presentation of the certificate properly indorsed, and it may be either a "demand certificate" or a "time certificate," the latter having a fixed time to run before payment may be demanded.

The rate of interest allowed by the bank varies with respect to the class of deposit, time, or savings deposits almost always being allowed interest, while deposits subject to check and demand certificates if given interest at all, draw interest at a lower rate.

Deposits Subject to Check

Probably 70 per cent of the total of all deposits in the United States is subject to check. Certainly the bulk of the deposit liabilities of commercial banks are of this class, and it is the free and general use of the deposit-and-check system which gives rise to approximately 90 per cent of bank accounting. Since all transit checks and clearing-house checks ultimately become self-checks when they reach the bank on which they are drawn, it will be readily understood that the position of the individual ledger bookkeeper is no sinecure. In the chapter relating to the work of the receiving teller

and the loan and discount department we have learned how deposits are created. They are used by the depositor in effecting payment through the check, which is a written order signed by the depositor authorizing the bank to charge his account and pay the amount specified to bearer or to the order of a named payee. The work of the individual ledger bookkeeper has to do with the crediting and debiting of individual accounts in these transactions.

The Ledgers

It would be possible to keep an accurate record of each individual account by filing the deposit tickets of each depositor in chronological order, together with the checks he may draw. This, however, would be a clumsy method; a more practical plan would be to set down the amount of each deposit and subtract the checks as they are presented. The book or record used by the bank for this purpose is the ledger, and the difference between the sum of all deposits and all checks is called the "balance." The sum of the balances due depositors is entered upon the bank statement or balance sheet as "deposits."

Ledgers are of various styles and forms and may consist of heavy, bound books, loose leaves, or cards. Individual bookkeeping has undergone successive steps by way of improvement, and the variations to be found between banks are due to the fact that each institution may represent a different stage in the process of evolution. Methods may vary also on account of the nature of the deposits and the number of depositors. A bank which has a relatively small number of comparatively inactive accounts may, with propriety, use the old-fashioned, weighted binding, two-column ledgers, whereas another institution, with a great number of

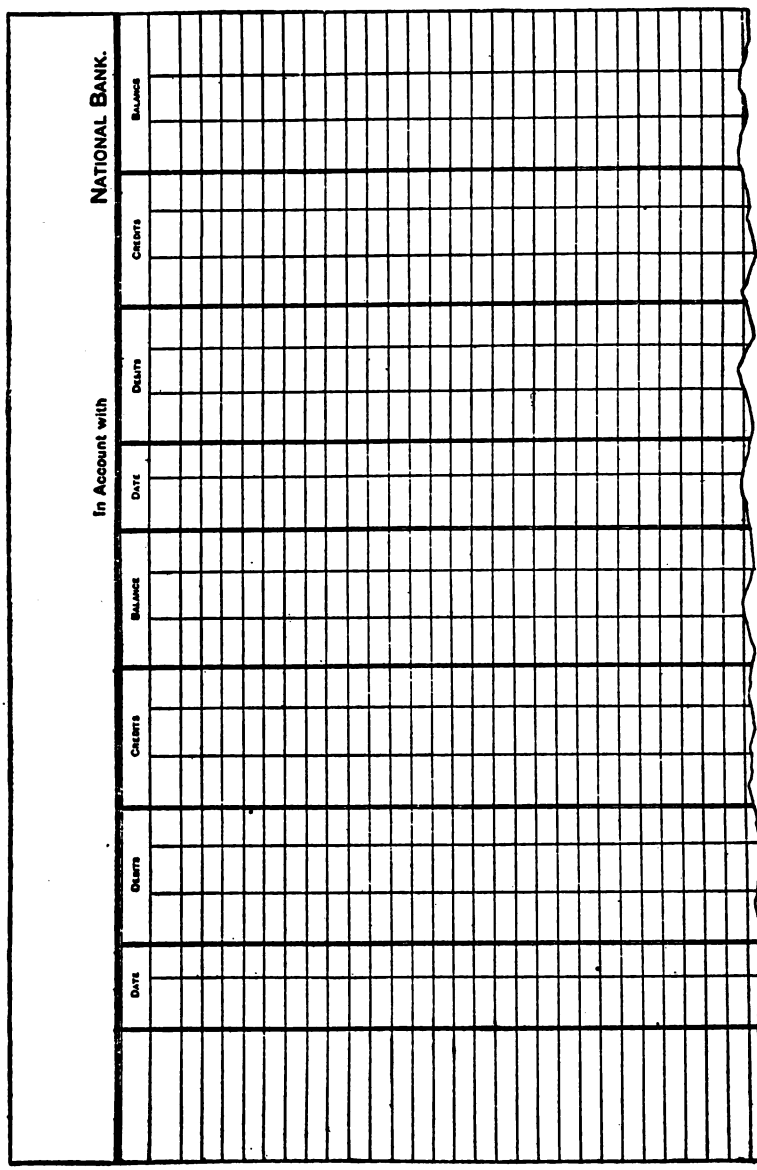


FIG. 57.—Ledger—Individual Deposit Account

active accounts, will find it necessary to use the three-column, loose-leaf ledger or card system.

But no matter what may be the style of ledger used, the underlying principle is the same in every case, that is, an accurate and permanent record of every deposit and check with the resultant balance. In the two-column ledger, the right-hand column is used to show balances and deposits, while the left-hand column is used to enter or "post" the debits. Under this system of bookkeeping a new balance may be struck after each debit or credit entry, or this calculation may be deferred until the end of the day's work. A "trial balance," taken at intervals of one month or bimonthly, is necessary to prove the accuracy of the bookkeeper's postings and constitutes one of the objections to the two-column bound ledger.

THE BOSTON LEDGER

A form of bound book still extensively used is the "Boston" ledger. Instead of heading the pages with the names of the depositors, the sheets, which are wider than ordinary ledger pages, are divided into six parallel divisions running up and down, one division for each day of the week. The names of the depositors are either written or printed in a column down the center between the "Wednesday" and "Thursday" divisions. Since each day's transactions appear in the same column right through the ledger, daily proof of the work can be made by adding the figures of each page at the bottom and recapitulating the totals on the proof sheet. The record of each account progresses laterally instead of down the page, as in the old-style book. Excellent as is the Boston ledger in many respects, it is giving way to the three-column, loose-leaf system.

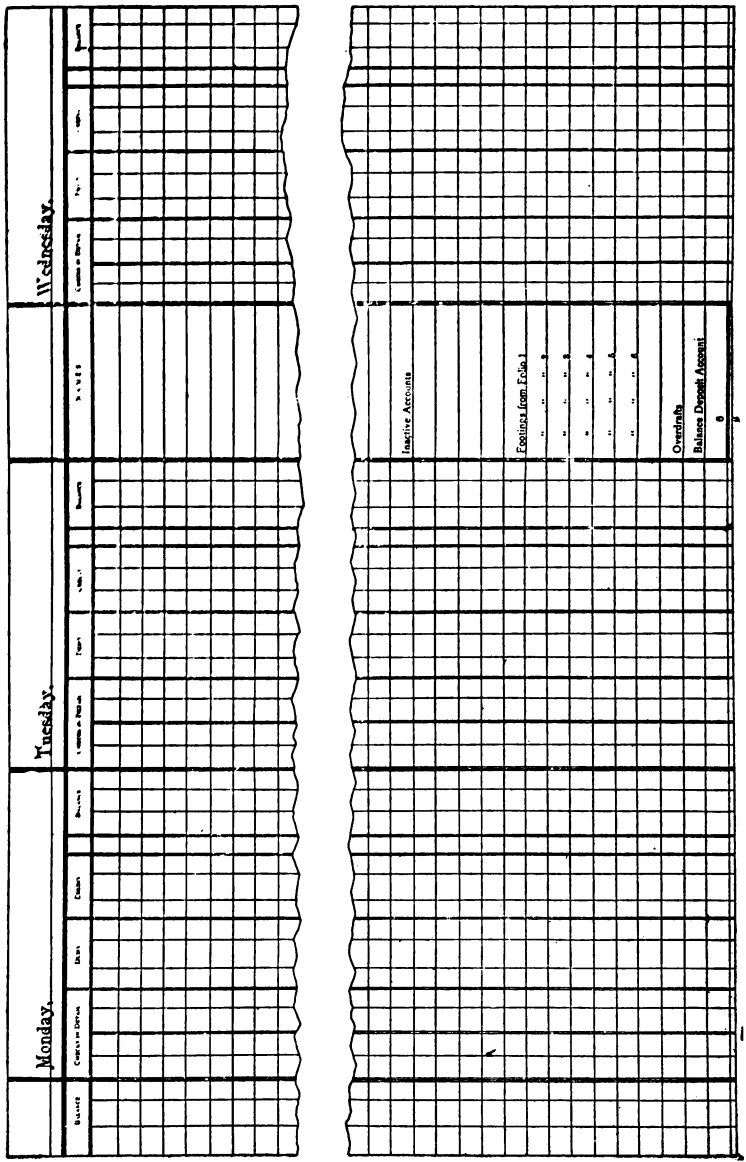


FIG. 58.—"Boston" Ledger—Individual Deposit Account
(Part of Full Sheet)

CARD LEDGER

The advantages of loose-leaf or card systems of bookkeeping are chiefly mechanical. The bookkeeper is never encumbered with old records, nor is he burdened with the blank pages which must be bound into a book to care for the operations of each account during the year. Furthermore, he can separate his active from his inactive accounts. Another advantage is that he can receive assistance if he needs it, whereas but one man at a time can work upon a bound book. Alphabetical divisions can be changed at any time should it become desirable to increase the number of bookkeepers. Both the Boston ledger and the loose-leaf ledger have three columns—debits, credits, and balance. In making settlement or proof, the Boston ledger operator adds his columns at the foot of each page, but under the loose-leaf system the sheets or cards may be written upon the adding machine, which gives a quicker and more accurate result. Also an assistant can be used who can "write up" the balances on the adding machine while the bookkeeper is striking them a few sheets in advance.

JOURNALS

Most ledger systems, of whatever style, are used in connection with a check journal, although the Boston system may be used without this supplementary record. As the bookkeeper receives his checks in "runs," "courses," or "batches" from the tellers, he assorts them alphabetically, all of one account together. He then lists them in his journal by name, or he may enter them upon a loose-leaf journal which fits in the carriage of the adding machine. Subtotals of the checks of each account are struck. He then posts the totals only in the debit column of his ledger. Deposit tickets may

also be first listed on a journal sheet, but this is seldom necessary, because most depositors make but one deposit a day and no time is saved by keeping a journal record. In order to make a proof, however, the bookkeeper makes a list of his day's credits, which must agree with the teller's record.

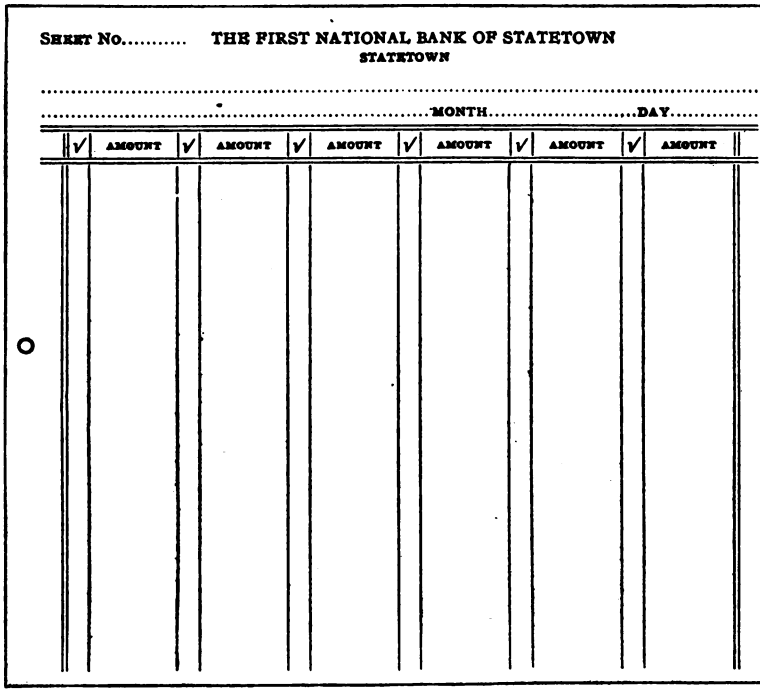


FIG. 59.—Three-Column Loose-Leaf Individual Ledger—Adding Machine Journal

A time-saving journal entry system is made possible through the use of numbers. Each account is given an arbitrary number, which is written or stamped at the top of each ledger sheet. After the checks have been written upon the journal, the bookkeeper begins to post to the ledger, but instead of writing the names of the accounts opposite his journal entry, he jots down the

number which he finds on each ledger sheet. This number then serves to identify the checks on his journal, should it become necessary to refer to the figures later.

Duties of the Bookkeeper

The work of the bookkeeper is by no means limited to the mere routine of posting debits and credits and extending balances, although this part of his work requires great care and accuracy. He must be on his guard at all times against overdrafts. As he posts his

The First National Bank

*Idaho*_____ *19*____

*Mr.*_____

_____

Dear Sir:

*According to our books your account appears overdrawn $*_____ *Please advise or call on us at once.*

If an immediate notice is given that your account is overdrawn, do not misconstrue the haste. It is a wise provision to detect forgery, raised checks or mistakes.

Respectfully,

_____ *Cashier*

REMARKS

_____

_____

_____

_____

Fig. 60.—Notice of Overdraft

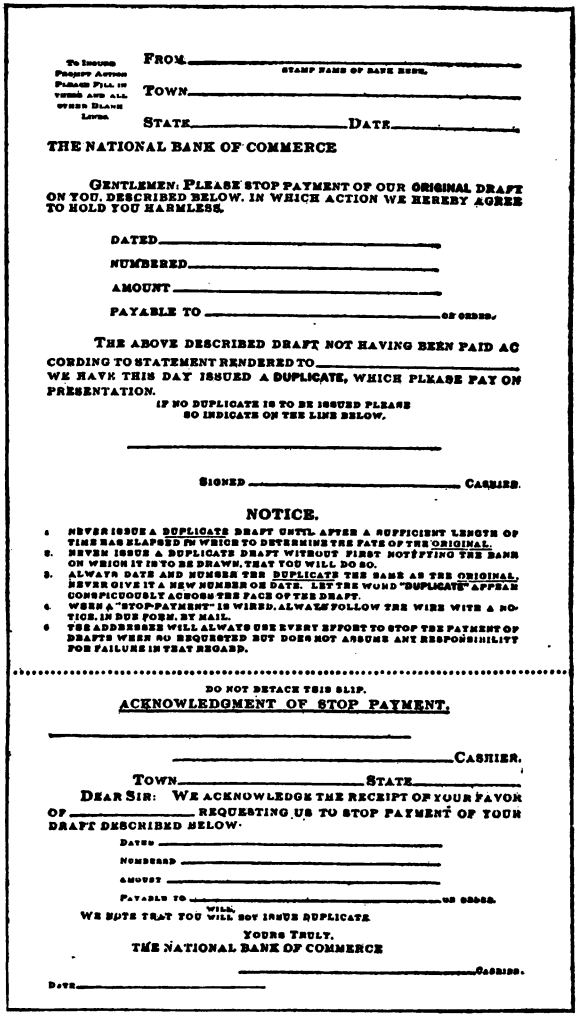
checks, he watches the balance, and should a check be presented which is larger than the balance, he at once notifies the tellers and officers. Overdrafts are discouraged by all banks, since they constitute unsecured, unauthorized loans without interest. The Comptroller

of the Currency has strongly recommended that national banks adopt rules against permitting their depositors to overdraw, and most of them observe this restriction rigidly. Should a depositor overdraw, he is at once notified and asked to make an immediate deposit. This courtesy is not shown a customer who habitually overdraws, his checks being refused when not good, and if he persists in the practice, he is asked to withdraw his account.

The bookkeeper must be careful that both deposits and checks are posted to the right accounts, or trouble is sure to follow. Large banks have many accounts of similar or even identical names, and unless extreme care is exercised by the bookkeeper, the check of John E. Smith is likely to be refused as "not good," because a deposit made by him several days previous has been credited in error to John A. Smith. A suit for damages may be the result. The bookkeepers are given notice of all "stop payment" orders, and it is their duty to catch a check which may have got by the tellers. Sometimes the bookkeepers, jointly with the tellers, are held responsible for the genuineness of signatures and the accuracy of indorsements, but whether so charged or not, good bookkeepers always watch these details.

Interest Calculations

At odd moments during the day, or perhaps before beginning the day's work, the bookkeeper will work upon his interest-bearing balances. The balance upon which interest is allowed is not, as a rule, the so-called "book-balance," and separate calculations are necessary to arrive at it. The general custom is to allow interest on the balance as shown at the end of the day, less the checks paid during the day. The theory is that the depositor is not entitled to receive interest on that part



To Insure Prompt Action Please Fill in Third and All Other Blank Lines

FROM _____
STAMP NAME OF BANK HERE.

TOWN _____

STATE _____ DATE _____

THE NATIONAL BANK OF COMMERCE

GENTLEMEN: PLEASE STOP PAYMENT OF OUR ORIGINAL DRAFT ON YOU, DESCRIBED BELOW, IN WHICH ACTION WE HEREBY AGREE TO HOLD YOU HARMLESS.

DATED _____

NUMBERED _____

AMOUNT _____

PAYABLE TO _____ OR ORDER.

THE ABOVE DESCRIBED DRAFT NOT HAVING BEEN PAID ACCORDING TO STATEMENT RENDERED TO _____ WE HAVE THIS DAY ISSUED A DUPLICATE, WHICH PLEASE PAY ON PRESENTATION.

IF NO DUPLICATE IS TO BE ISSUED PLEASE SO INDICATE ON THE LINE BELOW.

_____

SIGNED _____ CASHIER.

NOTICE.

1. NEVER ISSUE A DUPLICATE DRAFT UNTIL AFTER A SUFFICIENT LENGTH OF TIME HAS ELAPSED IN WHICH TO DETERMINE THE FATE OF THE ORIGINAL.
2. NEVER ISSUE A DUPLICATE DRAFT WITHOUT FIRST NOTIFYING THE BANK ON WHICH IT IS TO BE DRAWN, THAT YOU WILL DO SO.
3. ALWAYS DATE AND NUMBER THE DUPLICATE THE SAME AS THE ORIGINAL, NEVER GIVE IT A NEW NUMBER OR DATE. LET THE WORD "DUPLICATE" APPEAR CONSPICUOUSLY ACROSS THE FACE OF THE DRAFT.
4. WHEN A "STOP-PAYMENT" IS WIRED, ALWAYS FOLLOW THE WIRE WITH A NOTICE IN DUE FORM, BY MAIL.
5. THE ADDRESSEE WILL ALWAYS USE EVERY EFFORT TO STOP THE PAYMENT OF DRAFTS WHEN SO REQUESTED BUT DOES NOT ASSUME ANY RESPONSIBILITY FOR FAILURE IN THAT REGARD.

DO NOT DETACH THIS SLIP.

ACKNOWLEDGMENT OF STOP PAYMENT.

_____

_____ CASHIER.

TOWN _____ STATE _____

DEAR SIR: WE ACKNOWLEDGE THE RECEIPT OF YOUR FAVOR OF _____ REQUESTING US TO STOP PAYMENT OF YOUR DRAFT DESCRIBED BELOW.

DATED _____

NUMBERED _____

AMOUNT _____

PAYABLE TO _____ OR ORDER.

WE NOTE THAT YOU WILL NOT ISSUE DUPLICATE WITH.

YOURS TRULY,
THE NATIONAL BANK OF COMMERCE

_____ CASHIER.

DATE _____

FIG. 61.—Stop-Payment Order

of the balance which he has used by checking against it; nor can he receive interest on deposits the day of receipt. Most well-regulated banks deduct from the interest-bearing balance all items deposited until returns are received. Obviously the bank cannot pay interest

unless given the opportunity to earn it, and therefore the true interest-bearing balance consists only of that portion which is available for loaning purposes. Figures 62 and 63 show forms of interest slips.

The bookkeeper is provided with a memorandum made up by the transit or analysis department, showing the amount of transit checks and the number of days before returns will be received. His interest slips, one for each interest-bearing account, will show the book balance less the deductions, with the interest-bearing balance extended at the right. These daily balances are added at the end of the month, and interest for one day is allowed at the rate agreed upon. Interest tables are used by the bookkeeper which show the interest for one day upon any amount. The principle is that interest for one day upon $300,000 is the same as interest for thirty days upon $10,000, which may represent the average daily balance.

Bookkeeper's Settlement

A new bookkeeper beginning work at a ledger will "run off" the balances upon an adding machine to see that they agree with the figure shown by his predecessor. His settlement or proof at the end of the day's work is as follows: He adds all the day's credits to the morning balance total and subtracts the amount of debits shown by his journal totals; his new balance must foot up equal to the total shown on his proof. If he is "out," an odd amount may indicate that he has forgotten to post a check or deposit, which he may discover by referring to his journal records. If this does not disclose the difference, half the amount of an "over" may represent a check which has been carelessly posted in the credit column and half the amount of a "short" may prove to be a deposit ticket similarly transposed.

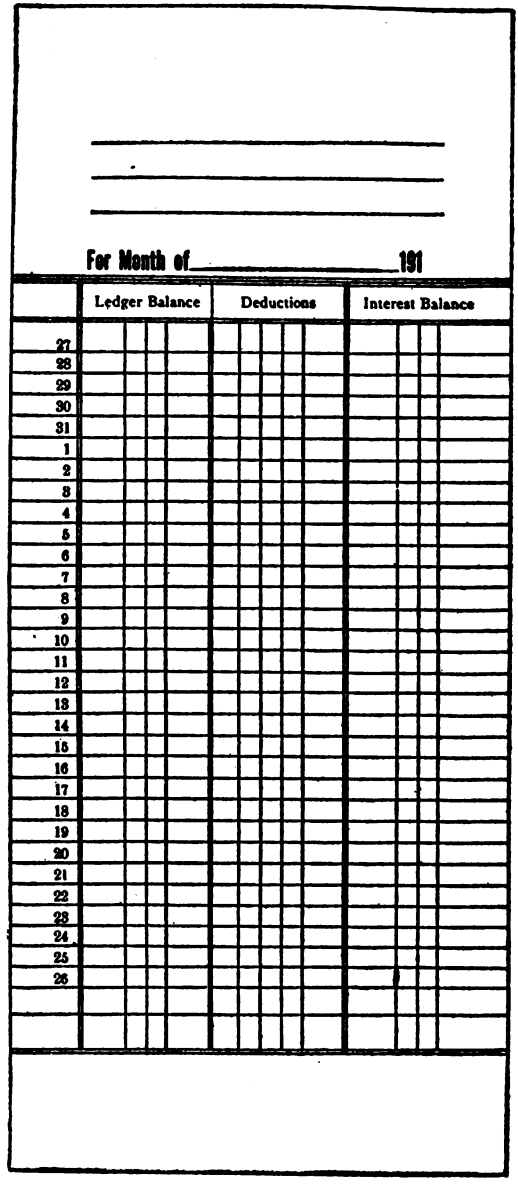


FIG. 62.—Interest Slip

.....

.....

In Interest Account With

National Bank, of La Crosse, Wis.

To.....

DR. BALANCE		CR. BALANCE
	28	
	29	
	30	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
	27	

..... *Interest* .....

FIG. 63.—Interest Slip

The first steps in locating bookkeepers' differences, however, consist in proving the extensions of the balances. A good bookkeeper seldom subtracts his checks in extending balances; he invariably "adds" and supplies the figure to make up the difference. So far as the writer knows, this simple plan is never taught in school as it should be.

Let us suppose a balance of $12,562.13. Two deposits or credits are made. These will be added to the balance in lead pencil or red ink figures. Several checks are posted during the day. These figures are shown in the following table:

Debits	Credits	Balance Column
426.16	624.13	$12,562.13
1,232.14	1,962.12	
100.00		
25.20	15,148.38	$13,364.88

In the application of ordinary school methods, the obvious thing for the bookkeeper to do is to add these check amounts in pencil or red ink as he did the balance and the deposits and then to subtract the sum from $15,148.38 to show the new balance—$13,364.88. Instead he adopts the simpler and quicker plan of subtraction by addition and begins to add his checks mentally as follows: "Six and four are ten, plus (eight) equals eighteen." He places the "eight" in the first place to the right as in ordinary addition, and with one to carry he adds the next column: "One and one are two and one are three and two are five, plus (eight) equals thirteen." "One and six are seven and two are nine and five are fourteen, plus (four) equals eighteen," and so on. The figures in parentheses are the mentally supplied figures which he sets down. Any simple problem in subtraction will be found easier by this method.

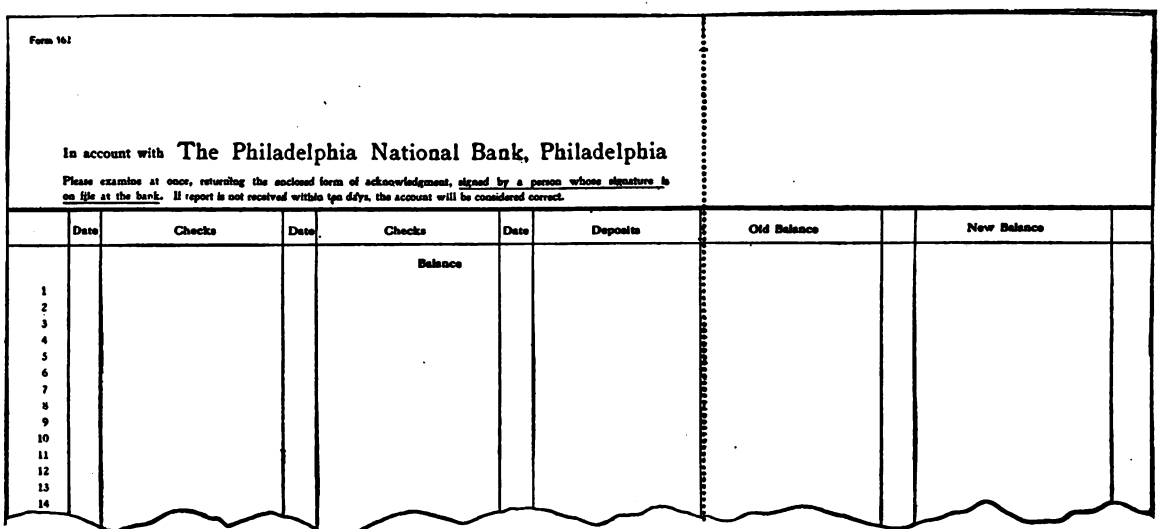
The debits posted to an account consist mostly of

checks, although occasionally a depositor may authorize the bank by letter to charge his account for various reasons. Credits, however, may consist of deposits, collection items paid, interest, or loans. When such credits are posted, the bookkeeper uses a letter or symbol to identify the entry on his ledger, as, for example, "C," meaning collection item paid; "D," a discount; "I," interest, etc.

Modern bookkeeping provides for a daily proof as compared with the "trial balance" system used in connection with the two-column bound ledger. The nature of the settlement is identical in all cases, but in order to make a trial balance, the balances of each account are copied from the ledger to a supplementary record; but as this is a work of considerable magnitude, it is done not oftener than once a week. The result is that unless the proof is correct at the first try, a vast amount of original work must be checked over to locate differences. The satisfaction of finding that he has made several thousand calculations correctly is a feeling that none but a veteran bookkeeper could appreciate, and certainly it is as refreshing an experience as holding a winning lottery ticket.

Depositors' Statements

Banks are gradually discontinuing the use of the pass-book settlement system in favor of a regular monthly statement of account. The pass book is still used, but its function is now limited to its proper purpose of a receipt for deposits. Under the pass-book system, the book was left at the bank by the depositor at irregular intervals to be "settled." The bookkeepers added all the deposit entries as shown by the book and then deducted the total of all checks paid, the balance being extended in the book as of a certain date agreeing with



Form 161

In account with **The Philadelphia National Bank, Philadelphia**

Please examine at once, returning the enclosed form of acknowledgment, signed by a person whose signature is on file at the bank. If report is not received within ten days, the account will be considered correct.

	Date	Checks	Date	Checks	Date	Deposits	Old Balance	New Balance
				Balance				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

FIG. 64.—Statement of Account Form

The following additional information appears at the bottom:

C signifies City Collection
F " Foreign Collection
L " List
K " Certified Check

All notes, checks, and drafts received by this bank for collection or credit will be transmitted in the usual manner for collection, either direct to the bank on which the same shall be drawn, or to such banks or persons as we shall deem reliable, upon the express condition that we do it solely for the convenience of our depositors or customers and will not be liable for any loss incurred, directly or indirectly, by omission, negligence, or default of any such bank, person, or subagent, or other loss in transit, or for any other cause whatever, until the proceeds in actual money come into our hands, and therefore credits or remittances made by us are subject to revocation until we have received final payment.

the balance as shown by the ledger. There are several flaws in this system, such as irregularity of time as to settlement, which not only is unsatisfactory to the depositor, but also presents an opportunity to a dishonest bookkeeper to manipulate an account, depending upon the long interval between settlements to delay discovery. During the period the book is in possession of the bank, the depositor is without evidence of having

The Philadelphia National Bank
Philadelphia, Pa.

Gentlemen:

We have received canceled vouchers for the period ending....., together with statement of account rendered to the same date, showing a balance due us of $....., which we find correct.

Yours very truly,

.....

This report must be signed by a person whose signature is on file at the bank.

FIG. 65.—Receipt for Statement and Vouchers

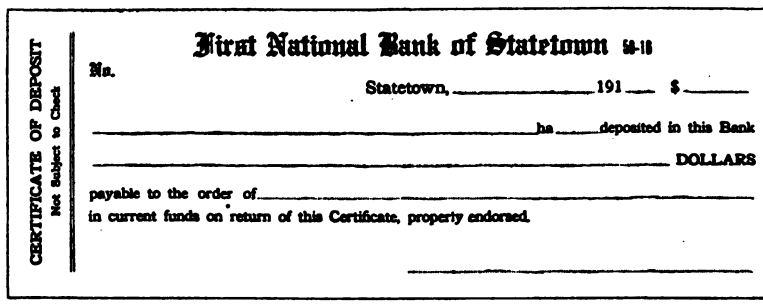
made deposits, unless he has duplicate deposit slips upon which the teller has acknowledged receipt.

Under the statement system, a supplementary record is kept of the transactions of each depositor. The deposits and other credits are added in a single column to the balance as shown at the beginning of the month, and the checks are listed in another column. At the end of the month the statements are compared with the ledger sheets as to balances, and this serves as a check on the bookkeeper. The statements are then mailed to the depositors with the checks paid during the month, or the depositors will call for them at the bank. After

comparing the statement of the bank with his own record, the depositor signs a receipt and acknowledges the accuracy of the balance as shown. Statements are usually made up on the adding machines. Machines are now in use in many banks and may be employed either for ordinary bookkeeping or for making up statements of account. These machines "pick up" the old balance, deduct checks, add the credits, and show the new balance.

Certificates of Deposit

Special deposits for which certificates of deposit are issued are not carried on the individual ledgers, but they may be properly described in connection with other individual deposits. The certificate of deposit is com-


CERTIFICATE OF DEPOSIT
Not Subject to Check

First National Bank of Statetown

No.

Statetown, _____ 191__ $_____

_____ has _____ deposited in this Bank

_____ DOLLARS

payable to the order of _____

in current funds on return of this Certificate, properly endorsed.

_____

FIG. 66.—Certificate of Deposit

plete in itself in that it is not subject to check, nor are additions made to it by subsequent deposits. Therefore, no ledger records are necessary, the amounts of the certificates being entered upon a register, the description of which consists of date of the deposit, name of the depositor, amount, and date paid. Separate registers are used for demand and time certificates. When the certificates are presented for payment, they are canceled and filed away.

Certified Checks

When checks are certified, the account of the drawer is charged, and a charge ticket charging "certified check account" is substituted for the check itself, and the general ledger item "certified checks" is credited with the amount, a register record similar to that of certificates of deposit being kept. Since certified checks outstanding are a deposit liability of the bank, the total amount of such items is technically a part of the deposits. When presented for payment they are charged against the Certified Check Account and the charge ticket which was placed among the depositor's vouchers is withdrawn, and the paid certified check is put in its place to be returned with other checks, with the statement at the end of the month. Certified check and certificate of deposit transactions have to do with general ledger rather than with individual ledger records, and will be more fully understood after reading the next chapter.

TEST QUESTIONS

1. What is the classification of deposits? Describe each kind briefly.
2. What is a ledger?
3. What is the chief point of advantage in the Boston ledger over the old form of ledger?
4. What is the most modern ledger system?
5. What are the duties of a bookkeeper?
6. What is a depositor's statement, and wherein is it superior to the old pass-book system?
7. What is the bookkeeper's settlement?

CHAPTER IX

THE GENERAL LEDGER

In the preceding chapters we have described the accounting methods and systems of the various departments of the bank, explaining the nature of each transaction and how the tellers, bookkeepers, and clerks make the records incidental thereto. We shall now take up that part of bank accounting which summarizes and explains all that has gone before.

If we should visit a large factory where automobiles are being made, assuming that we had never seen a completed motor car, it would be very difficult for us to understand what was going on as we watched one group of men forging axles, another turning out delicate pieces of mechanism upon lathes, and so on. However, if we should watch the workmen in the assembling department as they put all the detached and seemingly useless parts together into a finished vehicle, the whole industry would become plain at once.

So it is with bank accounting. The purpose of each book and record used in every department is made clear as we study the work of the general ledger bookkeepers. All the books are a part of the general ledger, and their number depends principally upon the size of the bank, just as the number of employees in each department is based upon the amount of business the bank does. The division in the accounting records enables each man to do his share and keep busy without "holding up" his neighbor at the next desk. When the figures are ulti-

mately brought together on the general ledger, there is nothing save the mere magnitude of the amounts that would indicate to the inexperienced observer how many separate and distinct transactions have been involved.

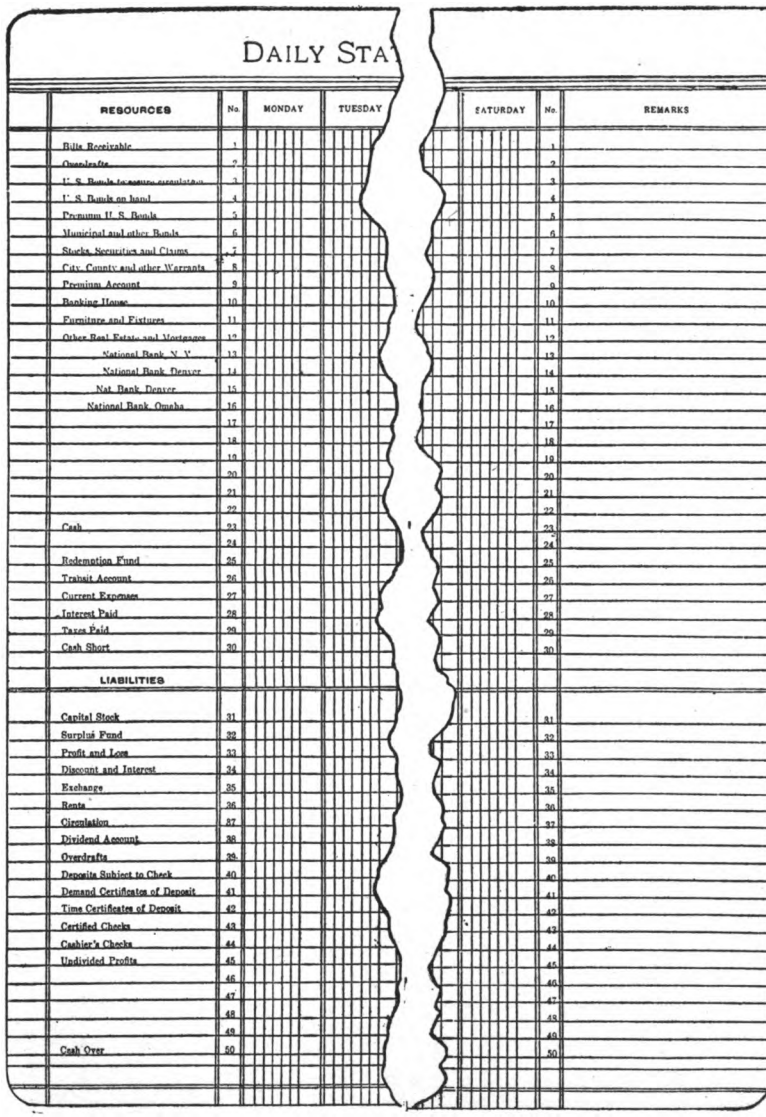
The General Bookkeeper

This clerk is the bookkeeper of the bank. He is the dealer in wholesale figures, whereas his fellows are the retailers. Every transaction gravitates to his desk and affects one or more items in the general balance sheet of the bank. Since he deals with completed transactions and with totals only, it follows that no matter how large the bank, a single bookkeeper can operate the general ledger. In small banks this work is usually done by the cashier at the end of the day. In larger institutions the general ledger bookkeeper is charged with various accounting duties in addition to looking after the daily statement of condition, as the balance sheet may be termed. For instance, he may make the calculations of reserve; keep the comparative statement record, which consists of the figures of each year for three or four years set down in parallel columns to show the growth of the bank; prepare special reports for the use of the directors; or act as head of the department of the bookkeepers who keep the records of accounts with other banks.

A number of forms are here inserted to show the nature of these records and operations. Figure 67 shows the daily statement and Figure 68, the daily comparative statement. Figure 69 illustrates forms of expense ledgers. Figures 70 and 73 show forms used in relation with the accounting work of bank accounts.

The Balance Sheet or Daily Statement

The statement of a bank consists of two equal sets of amounts: (1) what the bank owes, its liabilities; and



DAILY STA

RESOURCES	No.	MONDAY	TUESDAY	SATURDAY	No.	REMARKS
Bills Receivable	1				1	
Overdrafts	2				2	
U. S. Bonds to secure circulation	3				3	
U. S. Bonds on hand	4				4	
Premium U. S. Bonds	5				5	
Municipal and other Bonds	6				6	
Stocks, Securities and Claims	7				7	
City, County and other Warrants	8				8	
Premium Account	9				9	
Banking House	10				10	
Furniture and Fixtures	11				11	
Other Real Estate and Mortgages	12				12	
National Bank, N. Y.	13				13	
National Bank, Denver	14				14	
Nat. Bank, Denver	15				15	
National Bank, Omaha	16				16	
	17				17	
	18				18	
	19				19	
	20				20	
	21				21	
	22				22	
Cash	23				23	
	24				24	
Redemption Fund	25				25	
Transit Account	26				26	
Current Expenses	27				27	
Interest Paid	28				28	
Taxes Paid	29				29	
Cash Short	30				30	
LIABILITIES						
Capital Stock	31				31	
Surplus Fund	32				32	
Profit and Loss	33				33	
Discount and Interest	34				34	
Exchange	35				35	
Rents	36				36	
Circulation	37				37	
Dividend Account	38				38	
Overdrafts	39				39	
Deposits Subject to Check	40				40	
Demand Certificates of Deposit	41				41	
Time Certificates of Deposit	42				42	
Certified Checks	43				43	
Cashier's Checks	44				44	
Undivided Profits	45				45	
	46				46	
	47				47	
	48				48	
	49				49	
Cash Over	50				50	

FIG. 67.—Daily Statement

DAILY COMPARATIVE STATEMENT.

FIRST NATIONAL BANK, STATETOWN. _____ 191

LIABILITIES	1910	1911	1912
Capital Stock,			
Surplus,			
Undivided Profits,			
Interest,			
Collection and Exchange,			
Rents,			
Circulation Outstanding,			
Due to National Banks,			
Due to State Banks and Bankers,			
Dividends Unpaid,			
Deposits Subject to Check,			
Demand Certificates of Deposit,			
Time Certificates of Deposit,			
Certified Checks,			
Cashier's Checks,			
United States Deposits,			
Deposits U. S. Disbursing Officers,			

RESOURCES	1910	1911	1912
Loans and Discounts,			
Overdrafts,			
U. S. Bonds to Secure Circulation,			
Bonds to Secure U. S. Deposits,			
Bonds and Warrants,			
Tax Certificates,			
Judgments, Claims, Etc.,			
Bank Building,			
Current Expenses,			
Building Expenses,			
National, New York			
National, Chicago,			
National, Chicago,			
National, Minneapolis			
National, Sioux City,			
National, Sioux City,			
Items in Transit,			
Due from other Banks,			
Cash on Hand,			
Redemption Fund,			

FIG. 68.—Daily Comparative Statement

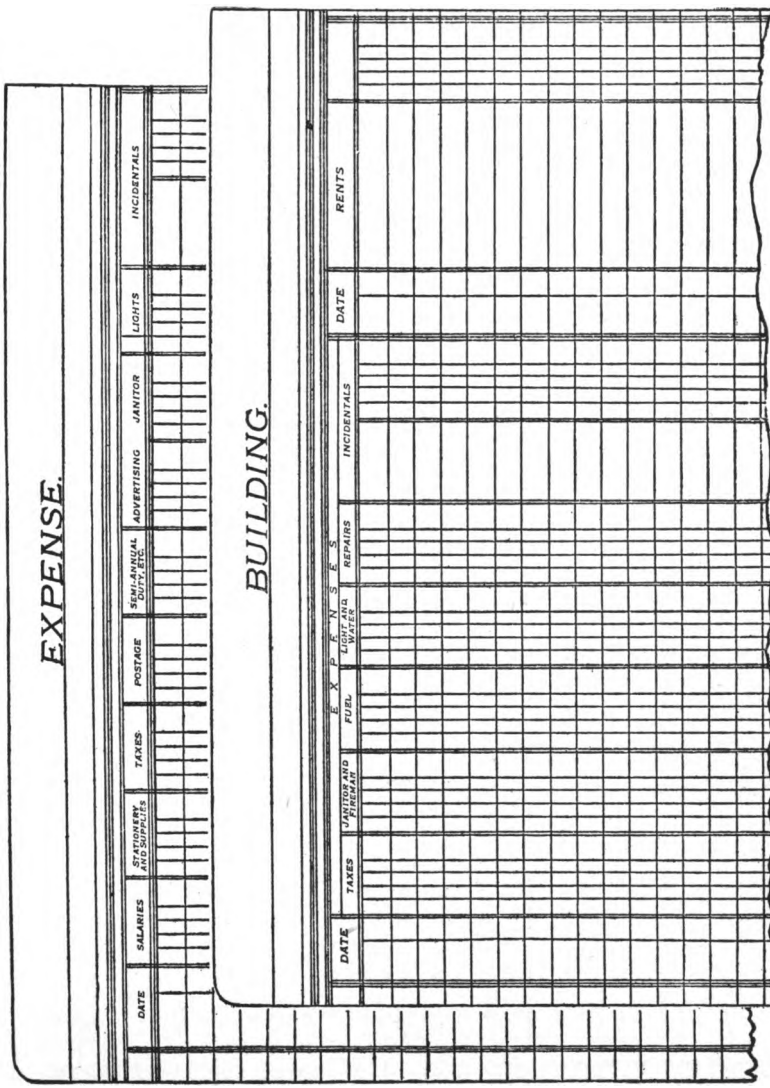
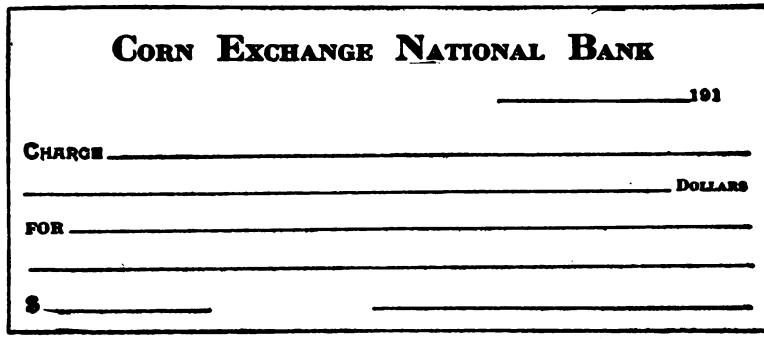


FIG. 69.—Expense Account Ledger Sheets

(2) what it owns, its assets or resources. They must be classified in some detail, since both liabilities and assets are of different kinds and due to or from various classes of creditors and debtors as described in a previous chapter.


CORN EXCHANGE NATIONAL BANK

_____ 191

CHARGE _____

_____ DOLLARS

FOR _____

_____

$ _____ _____

FIG. 70.—Charge Ticket

The report of a national bank will show the following list of resources and liabilities, which may be grouped into "three's" for convenience. In order to preserve the proper group arrangement some of the items have been rearranged as compared with the usual order as shown in a published bank statement or in the detailed report furnished to the comptroller illustrated in Figure 72.

Resources

Loans and investments..	Loans and discounts
	Overdrafts
	U. S. bonds to secure circulation
	U. S. bonds to secure U. S. deposits
	Other stocks, bonds, and mortgages
	Premiums on bonds purchased
	Real estate, furniture, and fixtures
Amounts due from other banks	Due from other national banks (reserve agents)
	Due from federal reserve bank
	Due from national banks (not reserve agents)
	Due from state banks and bankers
	Exchanges for clearing house
	Due from U. S. Treasurer (redemption fund)

Cash reserve and specie	National bank notes
	Nickels and cents
	Gold and silver coin
	Gold and silver certificates
	Legal tender notes (U. S. notes)

Liabilities

Due stockholders	Capital stock
	Surplus
	Undivided profits
	Dividends unpaid
Due general public	Circulation (note issue)
	Certified checks outstanding
	Cashiers checks outstanding
	U. S. deposits
Due depositors	Individual deposits subject to check
	Demand certificates of deposit
	Time certificates of deposit
	Due to other national banks
	Due to state banks

The two sides of the statement must always be equal; hence it follows that no transaction is possible which would upset this balance. For every debit there must be a corresponding credit and vice versa. However, these debits and credits may affect but one item on either side, or two items on the same side, or one or more items on each side. This can be more readily understood by referring to the diagram shown herewith:

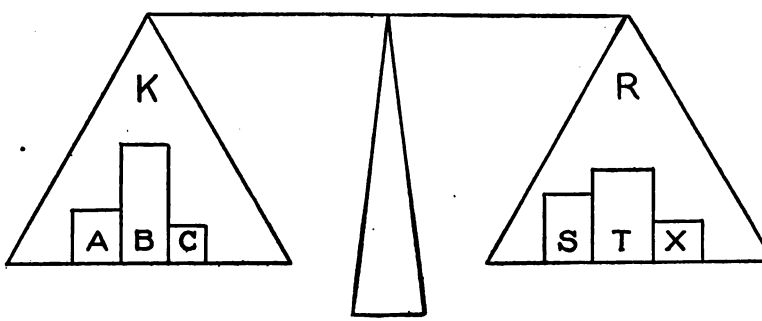


FIG. 71.—Graphic Representation of Double Entry Balance

If A, B, and C represent measures filled with gold coin, and S, T, and X are measures of different sizes but containing the same amount of gold, the two sides will balance each other. We may shift the contents as much as we please from A to C, or from S to X without disturbing the balance; but if we take away part of the contents of K, we must take an equal amount from R, although it makes no difference in the balance which particular measure is reduced as to contents.

The resource or asset side of the statement is on the debit side, and the liability side is the credit. Hence to debit an item on the resource side will increase it, but if we debit a liability, we decrease it. This can be illustrated by an example common to bank accounting by taking a single item from each side of the general ledger statement of Bank B.

Assets	*Liabilities*
Due from Bank A, $10,000	Due to Bank C, $50,000

Now if Bank C sends to Bank B for collection a check drawn on Bank A for $1,000, the result would be:

Assets	*Liabilities*
Due from Bank A, $11,000	Due to Bank C, $51,000

That is, Bank B by *crediting* the account of Bank C and *charging* the account of Bank A, has increased both sides of the statement.

Now let us assume that Bank B has two accounts in New York with Bank A and Bank D, which would appear in the statement of assets as:

Assets
Due from Bank A, $10,000
Due from Bank D, 15,000

If at the request of Bank B, Bank A should transfer $5,000 to Bank D, the general ledger bookkeeper of Bank

STATEMENT OF THE CONDITION OF THE INTER-STATE NATIONAL BANK

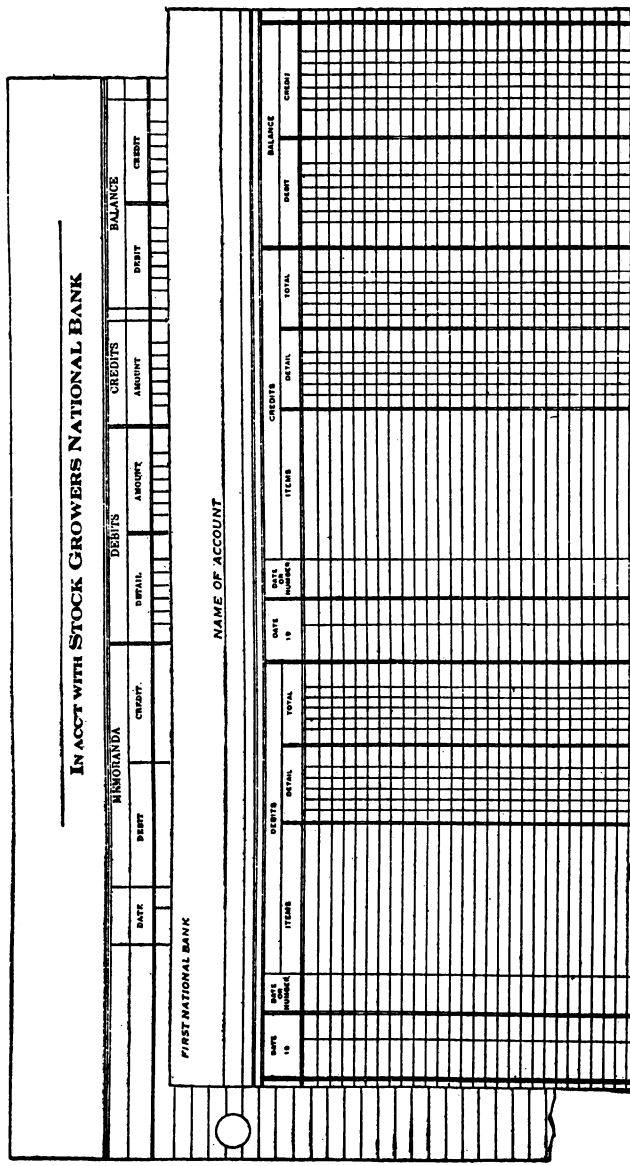


Fig. 73.—Bank Account Forms

B would *credit* Bank A and *charge* Bank D and there would be no change in the total figures of assets or liabilities of Bank B, although there has been both a debit and a credit. Therefore, it follows that millions of dollars of transactions may take place daily in the bank without altering the grand total of assets or liabilities more than a few thousand dollars either way.

Accounting Details

In the chapter relating to the work of the receiving teller he was referred to as the principal "feeder" of the other departments. It will be found convenient in explaining the operation of the general ledger to begin

Deposited in

The Tenth National Bank

Chicago

by

John Smith

Dec. 2, 1916

Notes	$ 25	
Silver	4	50
Checks payable as follows:		
Tenth National	50	
Ninth National, Chicago	10	
New York	100	
Total	$189	50

Fig. 74.—Deposit Ticket for Practice

with a deposit of general items and trace the accounting course of each check or cash item until it finally is accounted for on the bank's general balance or statement sheet. For convenience these items are shown in

Figure 74. We can then proceed with similar illustrations of the work of several of the other departments. For convenience, we shall eliminate in each example all items from the balance sheet except those affected by the transactions involved and assume that each operation is the only one of its kind on that day.

The method of proof has already been explained in the chapter on the "Receiving Teller." On that teller's distribution and final settlement sheet he is charged with the total amount of the ticket which he accounts for as follows:

Cash to paying teller	$ 29.50
Checks to individual ledger	50.00
Exchanges for clearing house	10.00
Charged to transit department	100.00

The paying teller's sheet which is given to the general ledger bookkeeper shows that the cash of the bank has increased $29.50, which account (asset) is debited.

The individual ledger bookkeeper credits (liability) the account of John Smith, the depositor, $189.50 and charges (liability) the account of the maker of the $50 check; this shows a net increase of $139.50 in his total balances due depositors.

The department which makes up the exchanges for the clearing house enters the check for $10 on the package of the Ninth National Bank, which then becomes a part of the item, "exchanges for the clearing house" (asset).

The transit department enters the check for $100 on the letter which is being sent to the bank's New York correspondent, which amount is then debited (asset) to the account of that bank.

Summing up, we note that liabilities have been increased by $139.50 and that assets have been increased a similar amount. We can now show the result on the

general ledger before and after the receipt of the deposit:

BEFORE

Assets		*Liabilities*	
Loans	$385,000.00	Capital	$ 25,000.00
Due from banks	20,000.00	Surplus	25,000.00
Exchanges for clearing house	5,000.00	Undivided profits	1,000.00
Cash	25,000.00	Deposits	384,000.00
	$435,000.00		$435,000.00

AFTER

Assets		*Liabilities*	
Loans	385,000.00	Capital	25,000.00
Due from banks	20,100.00	Surplus	25,000.00
Exchanges for clearing house	5,010.00	Undivided profits	1,000.00
Cash	25,029.50	Deposits	384,139.50
	$435,139.50		$435,139.50

If the deposit had consisted of checks drawn entirely upon the Tenth National Bank, there would have been no change whatever in any of the figures. The individual ledger bookkeeper would merely have had to change his balances due to depositors.

Using the same statement figures, we shall assume that John Smith, after making his deposit, discounts his note for $200, the amount of discount being $11.50, and that the proceeds passed to his credit. The discount department in any one of several ways, as previously explained, passes the credit to the individual ledger and the amount of the discount to the general ledger. The statement would then appear as follows:

Assets		*Liabilities*	
Loans	$385,200.00	Capital	$ 25,000.00
Due from banks	20,100.00	Surplus	25,000.00
Exchanges for clearing house	5,010.00	Undivided profits	1,000.00
Cash	25,029.50	Discount a/c	11.50
		Deposits	384,328.00
	$435,339.50		$435,339.50

Smith's note having fallen due is paid by him in cash The statement now reads:

Assets		*Liabilities*	
Loans	$385,000.00	Capital	$ 25,000.00
Due from banks	20,100.00	Surplus	25,000.00
Exchanges for clearing house	5,010.00	Undivided profits	1,000.00
Cash	25,229.50	Discount a/c	11.50
		Deposits	384,328.00
	$435,339.50		$435,339.50

In actual practice the figures shown in the foregoing statement would vary in other respects while the transactions here described are taking place. For example, the "exchanges for the clearing house" would have been converted into cash by the process of clearing. Our brief illustration, however, serves to illustrate the point that all transactions are finally shown upon the general ledger.

Comparison of the last two sets of figures indicates clearly how the profits of the bank accrue. For instance, the bank has earned $11.50, although there is no increase in the totals. As discounts are earned, they are carried into discount account usually for a six months' period. At the end of that time, that is to say twice annually, the total earnings are distributed to wipe off the various expense accounts on the asset side, such as salaries, rent, taxes, etc., and the balance is carried to dividend account. If the bank has enjoyed a period of prosperity, a part of the earnings will be transferred to the surplus, and the remainder will be passed to undivided profits or Profit and Loss Account.

We may now conclude this series of illustrations by showing the accounting changes that will result at the end of a "period," taking into consideration the following facts:

A "bad loan" of $1,000 which the examiner requires

the bank to "charge off" as worthless; an expense account representing salaries, etc., for the period which have been paid to the amount of $4,000; a semiannual dividend of 4 per cent on the capital stock amounting to $1,000; and an addition of $1,000 to surplus account. The figures on the general ledger statement before and after would appear about as follows:

BEFORE

Assets		*Liabilities*	
Loans	$385,000.00	Capital	$ 25,000.00
Due from banks	20,100.00	Surplus	25,000.00
Expense a/c	4,000.00	Undivided profits	1,000.00
Exchanges for clearing house	5,010.00	Discount a/c	8,000.00
Cash	25,229.50	Deposits	380,339.50
	$439,339.50		$439,339.50

AFTER

Assets		*Liabilities*	
Loans	$384,000.00	Capital	$ 25,000.00
Due from banks	20,100.00	Surplus	26,000.00
Exchanges for clearing house	5,010.00	Undivided profits	2,000.00
Cash	25,229.50	Dividend No. 20	1,000.00
		Deposits	380,339.50
	$434,339.50		$434,339.50

If the stockholders deposit their dividend checks, dividend account will be wiped out and the deposits will increase by $1,000. If, however, the checks are presented at the teller's window to be paid in cash, the dividend account will be wiped out and the cash will be reduced by an equal amount.

In a rough way we may use the final statement shown in this illustration to point out a few of the principles involved in reading a bank statement intelligently. Our earnings show that the institution has made a gross profit of $8,000 in six months. The loans being under $400,000, we note that the interest rate on loans must have averaged a little better than 4 per cent. A bank

of this size would probably employ a cashier at $3,000 per annum, a teller at $2,000, and a bookkeeper at $1,500, this making $6,500 in all, or $3,250 for the half-year. The remainder of the $4,000 expense account would be made up of postage, stationery, etc. The bank would be required to carry 12 per cent reserve against deposits consisting of cash and due from banks; this amount our statement shows to be approximately correct. The figures given are, of course, exaggerated somewhat as to actual conditions, no attempt having been made to "draw them to scale," so to speak, but the method involved is fairly clear and accurate.

Accounting Systems

In a bank of the size indicated by the foregoing statements, the bulk of the accounting would be done by the single teller. His proof or settlement sheet would show the cash detail at the beginning of business, the total amounts received on deposit, the payment of notes or loans, and the payments of interest. His proof would also show the amount of checks received payable by his own bank, the amount for each other local bank, and the amounts charged to each of the bank's out-of-town correspondents. The bookkeeper would post his general ledger direct from these figures after the teller had "settled" at the end of the day.

In a large bank there would be no difference whatever in the principles involved, except that each department included would make a part of the records; this requires interdepartmental settlement sheets. Such records are, however, merely incidental to the process of carrying the transactions through from their inception to the general ledger.

In the preceding chapters we have described accounting methods common to the majority of banks which use

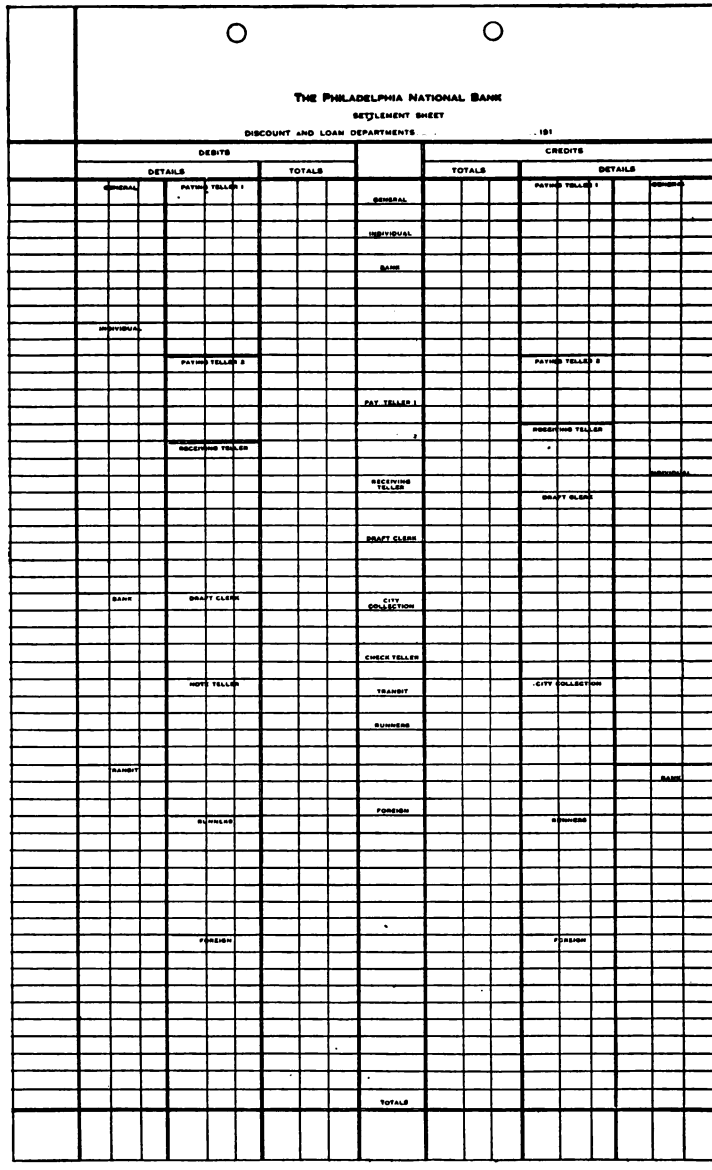


FIG. 75.—Interdepartment Settlement Sheets (Discount and Loan Departments) (Front)

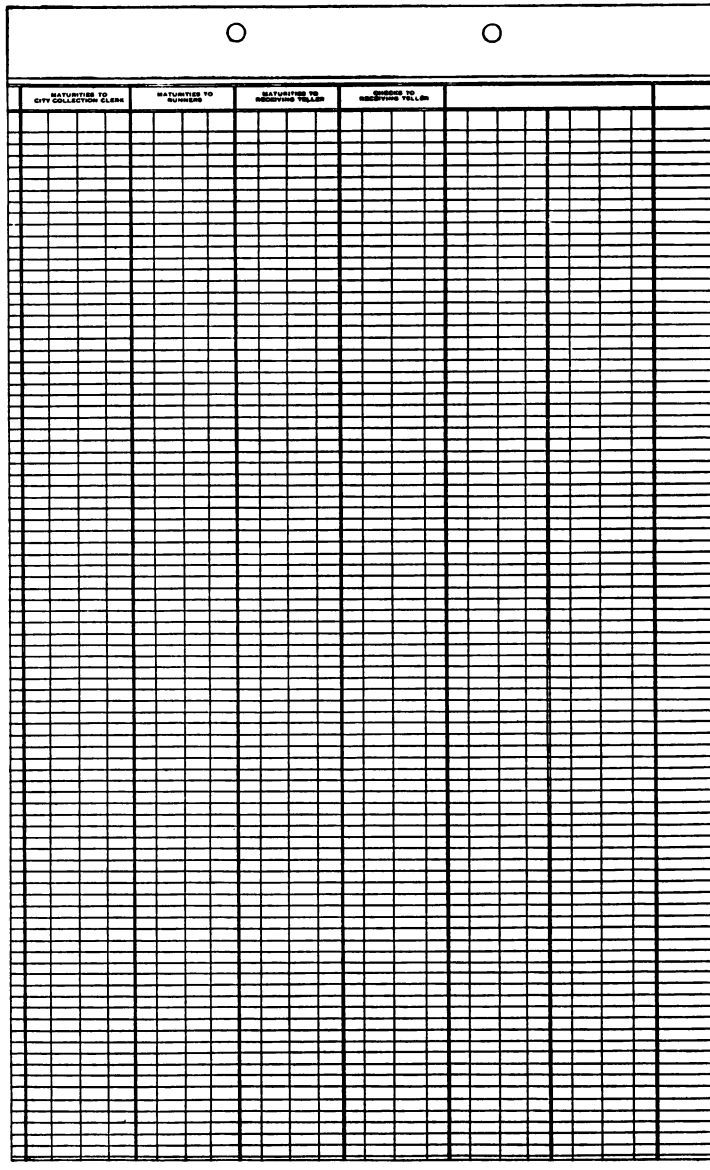

MATURITIES TO CITY COLLECTION CLERK
MATURITIES TO RUNNERS
MATURITIES TO RECEIVING TELLER
ORDERS TO RECEIVING TELLER

FIG. 75.—Continued (Back)

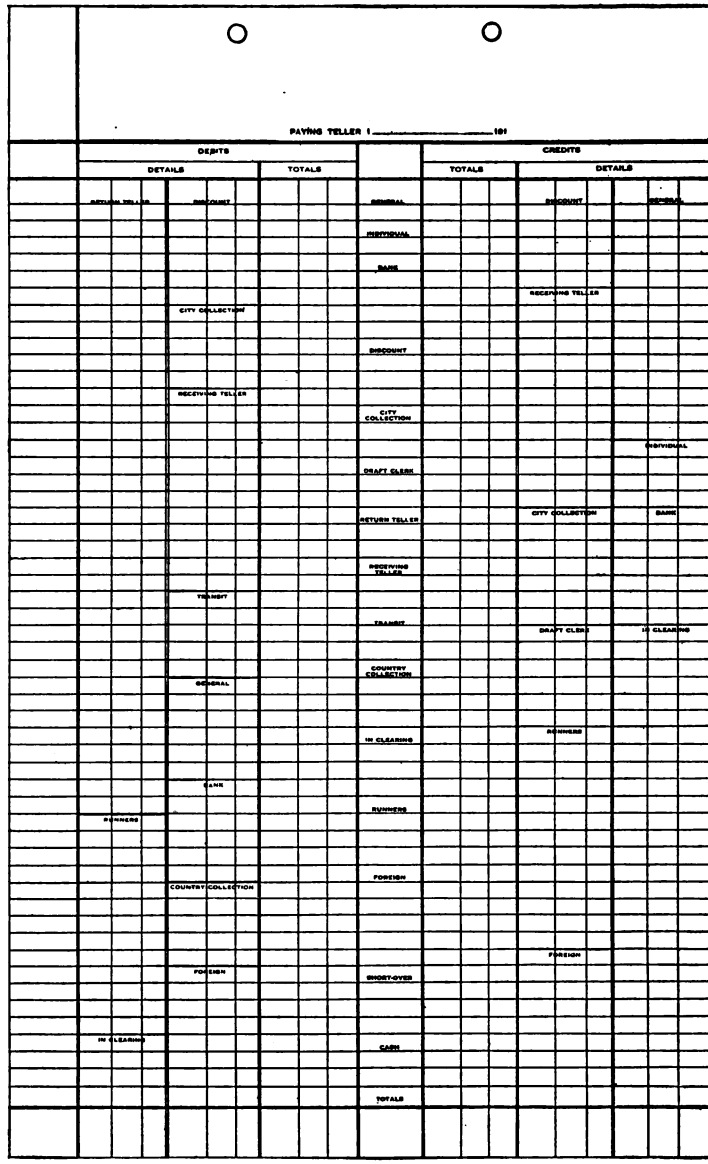


FIG. 76.—Interdepartment Settlement Sheets (Paying Teller) (Front)

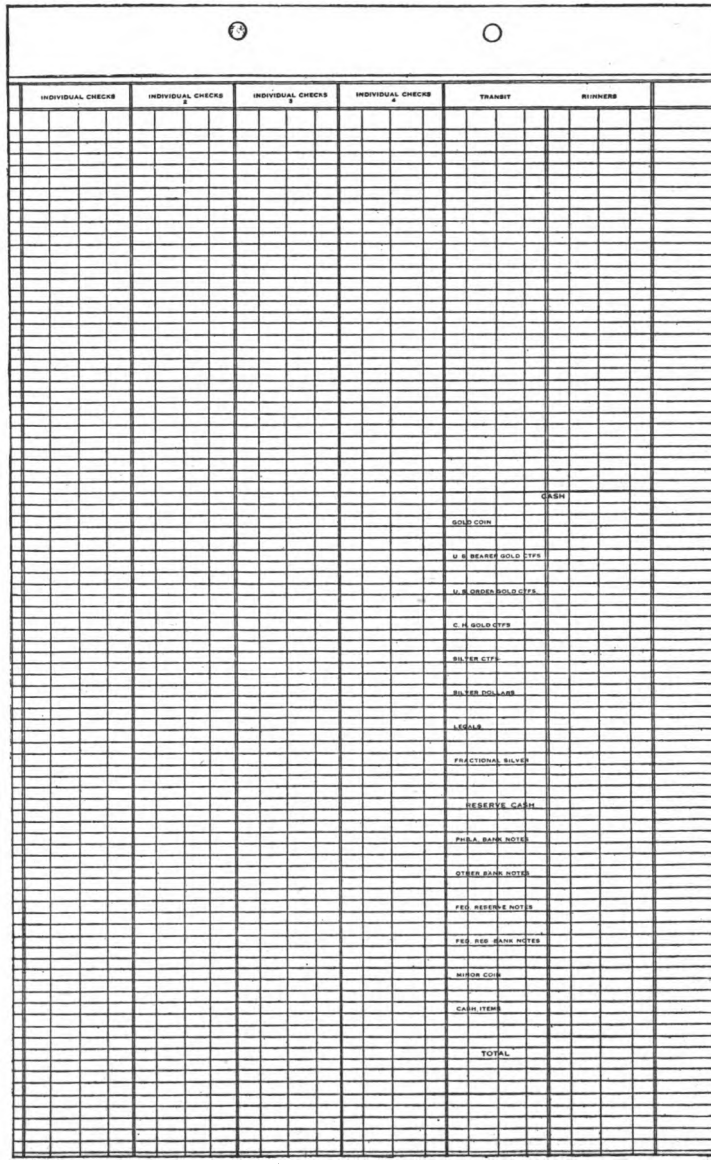


FIG. 76.—Continued (Back)

several variations of what might be termed "teller systems." That is, all transactions of the loan and discount, note teller, city collection, transit, and other departments pass through the records of the receiving teller and are by him accounted for to the general ledger bookkeeper. Such systems are developed step by step from the single teller system used by the small bank, and although as the bank grows, it is necessary to segregate the daily records of other departments on separate books and sheets, the totals are carried to the receiving teller's figures at the end of the day.

There is a better system used by the large banks and one which, when once installed, requires practically no modification no matter what the increase or business may be. Under this plan of accounting, each department deals independently with every other and carries the totals of its daily transactions directly to the general ledger. The settlement sheet resembles the distribution form used by the receiving teller in the "batch system," previously described and illustrated. Columns are provided for all items that come into the department, divided as to source, and other columns are used to account for the totals as they are charged at the end of the day to the departments which make the final accounting to the general ledger. Forms of settlement sheets are shown in Figures 75 and 76.

How this system is operated may be illustrated by using as an example a check on the bank itself and its accounting course through each of several departments where it may originate.

The check, if received by the in-mail department from an out-of-town bank correspondent, is credited in the proper column and charged to the check teller department or to the individual ledger bookkeeper if the bank does not have a check teller. It thus becomes a part of all the checks paid and charged against individual

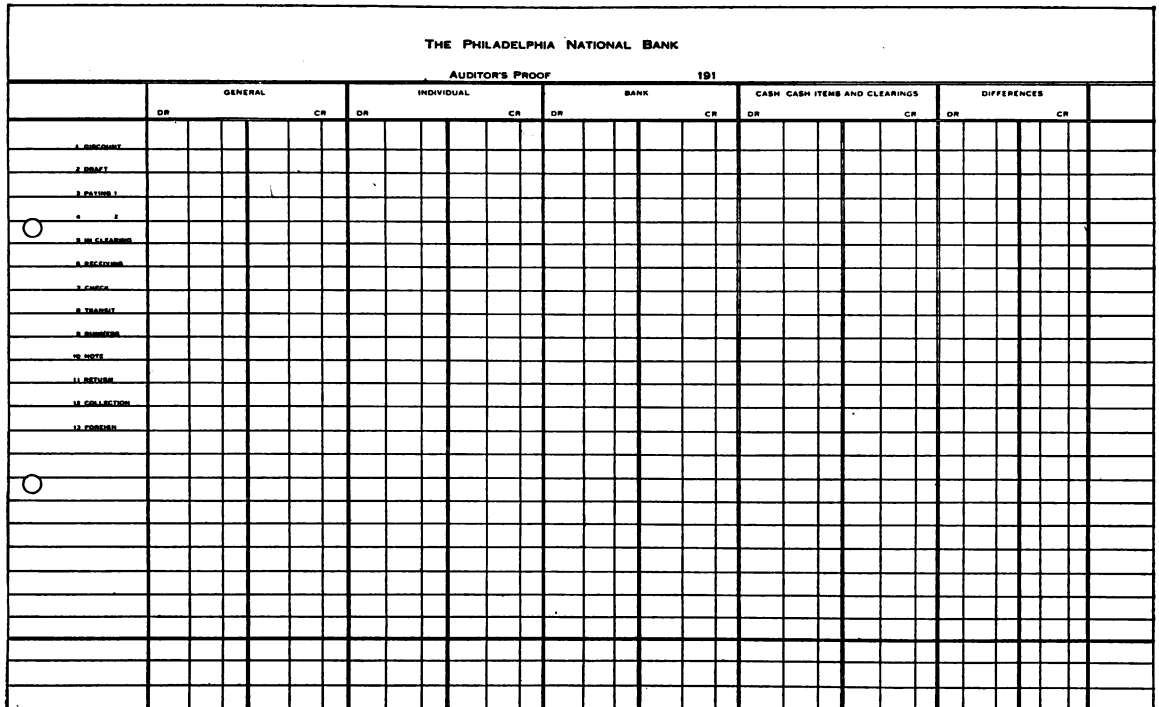


FIG. 77.—Auditor's Summary Sheet

deposits by the general ledger bookkeeper, who is given the total by the individual ledger department or check teller.

This same check may reach the bookkeepers through several other departments, each of which accounts for it in the same way. It may be cashed by the paying teller at his window; it may be received at the receiving teller's window from a local depositor; it may be given to the loan department to pay interest or to the note teller to pay a draft or note due, or to the draft teller to purchase the bank's New York draft.

A check payable out of town, received into the bank through any of the sources named, would be charged to the transit department; a check payable at a local clearing-house bank would be charged to that desk, and so on. At the end of the day, each department hands its settlement sheet to the auditor, who draws the totals together on a summary sheet, Figure 77, thus proving the grand settlement with the figures of the general ledger. Small differences, either over or short, are seldom checked for by the department involved, beyond a reasonable time. They are charged or credited, as the case may be, to Difference Account. Most of such errors turn up within a day or two, but if not, and if they are under a certain limit, say $10, they ultimately are charged or credited to Profit and Loss Account at the end of the period. This is done purely as a matter of economy, since it would be extravagant to use twenty dollars' worth of time to locate a departmental difference of two dollars.

This, however, does not apply to bookkeepers' settlements, which must always be exact in order to keep the balance sheet correct.

The purpose, function, and operation of the general ledger are comparatively simple when once the underlying principles are understood and made familiar through use.

TEST QUESTIONS

1. What is meant by the term "general" as applied to the bookkeeping activity of a bank?
2. Into what groups of threes may the resources and liabilities of a bank each be classified?
3. What is meant by the term "controlling account"?
4. Does the general bookkeeper do detailed work of any kind? If so, what kind?
5. Should a general bookkeeper be given much detail work?
6. What is the effect of a debit on the resource side of the statement? The liability side?
7. Explain how a banking operation may involve both a debit and a credit, and yet not change the total figures of assets and liabilities.
8. What is the effect upon the bank statement if Depositor A draws a check in favor of B, who immediately deposits it to his own account at the same bank?
9. Explain the effect upon the bank statement if the stockholders of the bank deposit their dividend checks. If they cash them at the teller's window.

CHAPTER X

AUDITS AND EXAMINATIONS

That banking is a vocation or science based upon economic as well as statute law is a fact which confronts the student of the practical features of the business at every turn. Modern processes of exchange have eliminated money as a necessary commodity in business transactions, and what we define as "banking systems" are the machinery we employ to provide more economical and efficient mediums, such as negotiable instruments, bank notes, checks, and similar devices used as substitutes for money. All nations since the earliest days of banking history have recognized the necessity of limiting the coinage of money to the sovereign power. So also modern monetary systems, which include banking, are subject to the control of the government.

This supervision is not confined merely to legislation and police power; duly authorized representatives of the state are delegated with visitorial powers, and these are regularly exercised to keep the operation of the banking units in strict conformity with the law. And so we find that the everyday work of the bank is adjusted and regulated in accordance with these fundamental economic principles which must be reckoned with if the nation is to enjoy the benefits of a sound system of money and exchange. In other words, the accounting system of a bank and its methods of doing business with its customers are concerned with more than rendering adequate service to its depositors and yielding profits to its stock-

holders; its books and accounts must be kept in such shape as to permit a ready examination by those whose duty it is as public servants to guard against weakness and error.

Bank Failures

The purpose of bank examination is threefold:
To determine—

1. If the institution is solvent.
2. If it is obeying the law.
3. If its policy is such as to warrant the assurance that the first two conditions will be maintained.

In other words, the purpose of bank examination is to prevent losses to the depositors, the stockholders, and the general public. A bank is solvent when it is able to pay all its debts or liabilities out of its resources. No bank ever failed that could not at any time show a balanced statement sheet so far as the figures themselves were concerned.

It is the purpose of examination to test the assets to determine whether they are worth the full value at which they are carried and also to disclose, if possible, any liabilities which may not be shown in the figures. Banking law seeks to prevent practices which the experiences of many years have proved to be unsafe and which, if persisted in, are certain to result in loss or ultimate ruin.

All banks expect losses due to various causes incidental to the risks of business, but so long as the capital is unimpaired, no serious results may ensue. If the capital and surplus are wiped out, failure is the inevitable result, and the bank must be closed. Failures are due in the majority of cases to poor judgment in extending loans. This may or may not involve an infraction of

banking law. Very often an officer of a failed bank is sent to jail because he has made excess loans to another officer or director or in some other way exceeded the authority vested in him. The general idea seems to prevail in the public mind that the incarcerated banker has stolen the money of the bank. While such a banker deserves little sympathy, it is only fair to say that very few banks fail because the cashier or the president has broken the eighth commandment. Practically all bank officers and employees are under bond which would restore to the bank any money which they might embezzle, so that failures from this cause are exceedingly rare. Poor judgment in making investments in which the banker has been entirely honest, even if unfortunate, causes most losses.

Kinds of Examinations

To guard against weaknesses and excesses of every variety there are in all four kinds of examinations, two of which are external in that the bank has no control over them, and two of which are internal, subject in a measure to the authority of the management of the institution examined. The first two are practically identical and consist of investigations by the national bank examiners in the one case and by the state bank examiners in the other. These two examinations differ only in that they apply to national or state banks; this depends upon the source of the charter of the bank. The internal examinations are conducted by certified public accountants who are employed by the bank or by a clearing-house examiner, who is officially engaged by the clearing-house association of which the bank is a member. In all cases the cost of examination is borne by the bank examined. This applies to every kind of examination.

Methods of the Examiner

Since all examinations are alike as to their object, it is unnecessary to describe each separately; in fact, there is no essential difference between them except in the method of applying remedies for any irregularity which may be disclosed. The examiner makes his appearance unexpectedly either before the vault is opened in the morning or immediately after the close of business in the late afternoon. He is thus able to prevent any substitution or addition to cash or securities which the bank may hold. Throughout the entire investigation he proceeds on the theory that there may be something wrong which it is his duty to disclose. This point of view must not be construed as a reflection on the bank or its officers. The examiner is in the position of the doctor making a test of the physical condition of an applicant for life insurance—he hopes he may find nothing to criticize, but rather because disease is not there than that he fail to discover it should it be present.

A bank is examined as of a certain date, and the first step is to certify the settlement or proof of the day's work in the general ledger statement. As soon as these figures have been checked, the examiner can begin a more leisurely examination of every detail or source of the transactions of which these figures are the record. Before checking the accounting records the cash is proved, since this is the most liquid asset of the bank and offers the most convenient opportunities for manipulation should the bank be "short" through loss. Furthermore, the cash of a bank cannot be earmarked, as is the case with checks, notes, etc.; hence it must be accounted for in total. Since the necessity for payments to depositors is immediate, the cash cannot be examined while it is undergoing constant change. Of course the vault or reserve cash is not subject to this condition, and

in very large banks a seal may be set upon the compartment in which this inactive store of currency is placed and the examiner's assistants be permitted to devote a day or two in proving the count.

All checks and cash items in the possession of the bank are checked carefully, and their collection is verified. They consist of checks payable through the clearing house or by other local banks. The importance of an immediate proof of these items is obvious, since it is apparent that if the cashier were short in his accounts, he might make temporary restoration by drawing upon a neighboring bank and adding the check to his cash assets.

Examination of Accounts

Every transaction recorded upon the books and affecting the settlement of the day which the examination covers is traced to its source. Correspondent banks receive a letter from the examiner stating the amount shown to be due by or to the bank written to and asking for a reconcilement or verification. Or these out-of-town banks may be simply asked to send a copy of the account current between the two institutions, which is then checked up in detail by the examiner at his own office. The individual ledger balances are proved as to the total, and the pass books of several, if not all, the depositors may be sent for, for settlement. The use of the monthly statement system by banks has greatly simplified this division of the examiner's work. The certified check and the cashier's check register are examined to see that all entries are bona fide; in fact, every precaution is taken to disclose any fraud on the part of an officer, between two employees, or between an employee and an outside customer of the bank. For obvious reasons it would be unwise to explain in detail the various

methods that have been used to defraud banks, but needless to say, the examiners are well posted and on their guard against the ordinary schemes used by those who are criminally inclined.

Testing the Loans

The largest single asset of any bank is the money invested in loans and securities. In checking up loans, discounts, and investments, the examiner makes three tests:

As to—

1. The existence of the notes, bills of exchange, bonds, or other evidences of debt.
2. The genuineness of signatures, correctness as to form, negotiability, right of title, etc.
3. The worth or value of the loans viewed as credit risks.

The first step, therefore, is to go through the portfolio and check the notes with the discount register. In a similar manner the bonds and securities are compared with the bond and investment register. While this is being done, the examiner seeks to detect any irregularity as to the form of the instruments.

Are they properly executed by bona fide makers?

If secured by collateral, does the note contain an assignment clause which gives the bank the right to sell the collateral in case of need?

Are the notes correctly indorsed?

Are any past due?

From the credit viewpoint do the loans consist of constant renewals or are they paid at maturity?

Are items of doubtful worth carried at face value?

Have the securities held as collateral a ready market, and is sufficient margin being maintained?

It will be seen from the foregoing general suggestions that the good examiner is well versed in banking and commercial law as well as experienced in credits and banking practice. The reason that a clearing-house examination is generally more effective than the official examination is because it is conducted by an examiner who spends his entire time in one place constantly adding to his files of credit information. He is an adviser as well as an examiner.

Policy of the Bank

After the examiner has finished his proof of the cash, audit of the accounts, and test of the loans, he makes a general survey or summary upon which to base an estimate of the policy of the bank. In short, the examiner delves into the future as well as the present and the past. A bank may be entirely solvent at the time of examination, but a trained observer may detect flaws in the management which if not corrected might lead to excesses and ultimate failure.

In addition to satisfying himself that banking law is being strictly adhered to, the examiner takes note of the daily habits, so to speak, of the institution, which fix the character of the bank pretty much as personal virtues and shortcomings determine the social and moral standing of an individual. The examiner must possess a certain degree of intuition in drawing his conclusions, but a few questions may be suggested which admit of definite determination and which for the most part are self-explanatory as to their bearing on the condition and policy of the bank:

Do the officers and directors borrow money of the bank?

Are the loans promptly paid?

Are the board meetings regularly attended?

Are the clerks and tellers amply bonded?
Do they take regular vacations?
Are the accounts of the individual depositors settled frequently?
Do the tellers have access to the ledgers?
Are cross entries on the books approved by an official?
Are all loans submitted to the directors for their approval?
Does the bank maintain an adequate reserve?
Are doubtful assets charged off to profit and loss periodically?

There are numerous other questions of similar nature varying as to the class of bank under investigation and the nature of its business. When the examination is completed, a report is rendered and the bank is notified of any irregularities which must be corrected.

Internal Audits

All large banks employ an auditor whose duty it is to check all settlements and other accounting transactions. In small banks this work is done by an officer. The auditor usually has several assistants who spend their time reconciling accounts with other banks, proving interest calculations, and otherwise testing the accuracy of the accounts. Under modern accounting systems each department hands its settlement sheet or proof to the auditor, who then draws all the figures together, thus proving the debits and credits made by the general ledger bookkeeper in his control accounts.

In addition to this work the auditor checks the interest payments to depositors and the interest paid to the bank on balances it may carry for exchange or reserve purposes with other institutions. The general bookkeeper usually keeps the accounts with other banks, although if the bank has many such accounts, separate "bank ledg-

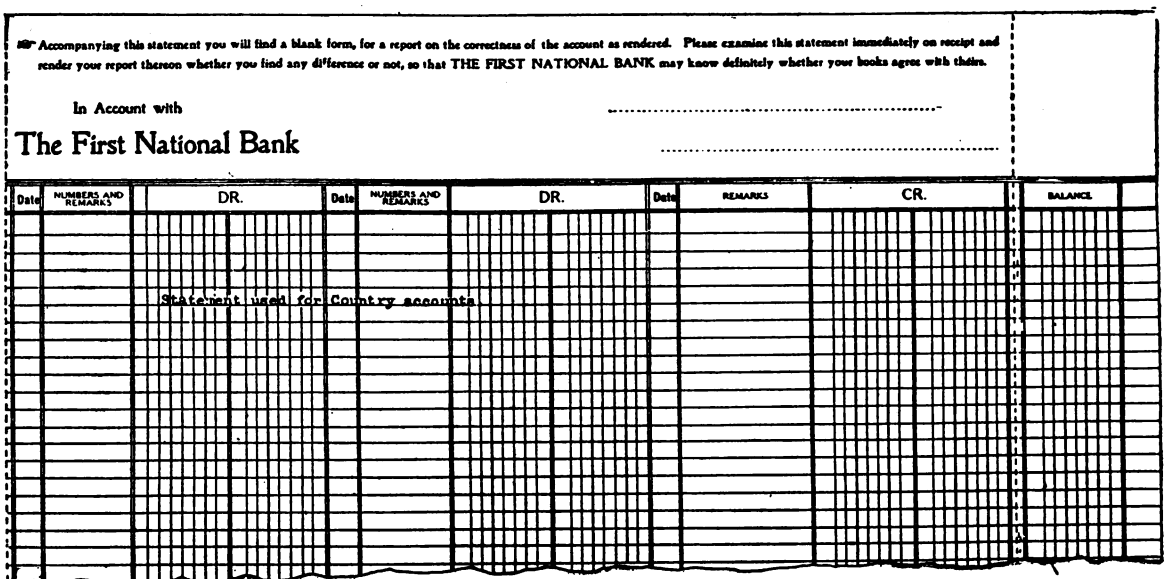

☞ Accompanying this statement you will find a blank form, for a report on the correctness of the account as rendered. Please examine this statement immediately on receipt and render your report thereon whether you find any difference or not, so that THE FIRST NATIONAL BANK may know definitely whether your books agree with theirs.
In Account with
The First National Bank
Date
NUMBERS AND REMARKS
DR.
Date
NUMBERS AND REMARKS
DR.
Date
REMARKS
CR.
BALANCE
Statement used for Country accounts

FIG. 78.—Monthly Statement to Country Banks

Items of entry are described by number for which a key is provided. For example, 1, remittance; 2, collection item; 3, draft; 4, transfer; etc.

ers'' are maintained. These are kept just as the individual accounts are, and are subject to the same kinds of debits and credits. In addition to the ''credit'' accounts or amounts ''due to banks,'' there are also many ''debit'' balances which in total comprise the ''due from banks'' item on the general statement. This item

PLEASE EXAMINE STATEMENT OF ACCOUNT, AND REPORT AS TO ITS CORRECTNESS, ON THIS BLANK OVER AN AUTHORIZED SIGNATURE WITHIN TEN DAYS OF RECEIPT

DATE_____

NAME OF BANK_____

PLACE_____

To THE AMERICAN NATIONAL BANK.

YOUR STATEMENT OF ACCOUNT RENDERED TO CLOSE OF BUSINESS ON_____

SHOWING BALANCE OF $_____ DUE_____ HAS BEEN EXAMINED AND FOUND CORRECT WITH THE EXCEPTIONS, IF ANY, NOTED BELOW.

YOURS RESPECTFULLY,

_____

CASHIER

PLEASE SIGN WITH SIGNATURE AUTHORIZED AND ON FILE WITH US

DR. CR

Date of Charge	DESCRIPTION	DOLLARS	CTS.	Date Since Credited by us	Date of Credit	DESCRIPTION	DOLLARS	CTS.	Date Since Charged by us
	We Debit (not in your statement)					We Credit (not in your statement)			
						Total Drafts issued by us (not charged by you)			
	Our Remittance in Transit								
	" " "								
	" " "								
						You Credit (not on our books)			
	You Debit (not on our books)					(State if since debited)			
	(State if since credited)								
	Your Balance to our credit					Our Balance to your debit			
	Our Balance to your credit					Your Balance to our debit			
	TOTAL					TOTAL			

IN REPORTING EXCEPTIONS KINDLY GIVE DATES AND FULL DESCRIPTION AND STATE WHETHER SINCE DEBITED OR CREDITED BY YOU

ALSO REPORT ANY COUNTER ENTRIES APPEARING ON THE STATEMENT NOT SHOWN ON YOUR BOOKS

FIG. 79.—Auditor's Reconcilement Form

may represent checks in process of collection or balances carried with other banks as above explained. As checks are sent to correspondent banks for collection, the amounts of such checks are charged to them, and when remittances are received in payment, the accounts are credited. A daily record is kept of each account, known as the "statement" or "account current," and at the end of the month these statements are ruled up and forwarded to the correspondent banks for "reconcilement." Since letters in transit, drafts unpresented, collection credit advices, returned items, and other entries are constantly "in the air" between two banks that do business with each other, a reconcilement is necessary to account for the difference between the balances as shown on the books of the banks as of the same date. Errors or omissions of debits and credits can thus be adjusted.

The auditor also counts and proves the teller's cash at frequent intervals, using the methods employed by the outside examiner in that he does not give advance notice of the time of examination. In correct organization theory the auditor is independent of the entire force including the officers and is responsible directly to the president and board of directors. The directors themselves usually conduct a formal examination of the bank through an examination committee of their own members. This is done semiannually immediately preceding the close of the "period," at which time the earnings of the bank are passed to surplus and dividend account.

TEST QUESTIONS

1. On what fundamental principle is it deemed necessary to examine banking institutions? Why are banks subjected to examination and not other business?
2. What are the three purposes of a bank examination?
3. A bank may be subject to four examinations by different bodies. What are these four kinds of examinations?

4. What is the significance of the "reconcilement" in examining the country bank accounts?

5. Why are not the individual deposits so reconciled?

6. What are some of the points to be observed in auditing the loans and discounts?

7. What are the ordinary duties of a bank auditor?

8. What are some of the inquiries that should be directed to ascertain the correct internal policy of a bank?

9. Should a bank auditor derive his authority from the directors or from the officers of an institution?

CHAPTER XI

SAFEGUARDS AND SERVICE

There is a certain "atmosphere" which characterizes bank work and to which the banker becomes attached very much as the carpenter who craves the feel and smell of new lumber, or the machinist to whom the whir of belts and power transmission is a necessary part of his daily round and is, subconsciously perhaps, music to his ears. As in other trades and professions men come and go in banking, but those who have a natural aptitude for the vocation and attain success for themselves and their institutions are those who find enjoyment in the rustle of the ledger sheet, the smell of ink and stationery, the clink of coins, and the click of adding machines.

These must come first, but there must also be keen judgment, conservative tendencies, a studious mind, an inquiring interest in human nature, and a liking for the economic sciences, else the young man who enters the bank from the schoolroom either will fail to rise higher than clerk or teller or will seek more congenial employment. The day of the cold, austere, solemn-visaged banker behind the counter of a musty and dismal banking room is past. In his place we have the keen, alert business man, who conducts his affairs according to modern standards.

There remain, however, various customs and practices which the very nature of banking requires and which are largely the result of the risk incidental to the guar-

dianship of the evidences of wealth with which the banker is charged. We must go behind the scenes to become intimate with the many problems of management which confront the average banker and with which the public is generally unfamiliar. The banker must protect himself against danger from without and dishonesty from within, and while these matters are referred to in other chapters, it may be well to go into more detail here.

The Vault

The "strong box" of the bank is a massive compartment built of armor plate steel designed to be fire, burglar, and mob proof. It may be on the street level or in the basement reached by an inclosed elevator. The entrance consists of an inner and outer door, each protected by a combination lock. This in turn is secured by a time clock, a device which does not automatically open the door at a predetermined hour, but which permits the combination to be operated by anyone familiar with it at the time fixed. There may also be a small emergency door, a sort of hole in the vault wall, similarly protected. This is provided in case the clock or combination on the main door through accident or carelessness fails to work. Within the main vault there are vaults or safes in which the cash and valuable securities are stored, access to which may only be had by the proper officers and tellers. The inner steel doors to these are secured by double locks requiring the use of two keys and the presence of more than one teller or officer before they may be opened.

The vault is often located within a vault room, which is constructed of solid masonry with an inner steel lining, and the walls of sufficient thickness to resist any attack by fire or criminal. Sometimes the vault is raised

from the floor and supported by steel beams; thus it would be impossible to bore into it from below without discovery. Another plan is to inclose the entire vault in an outer shell of wood through which fine wires are introduced, and any tampering immediately gives an alarm. Some vaults are constructed so that the life of anyone accidentally imprisoned may be saved before the air within is exhausted. This is accomplished by placing inside the vault a kit of tools and a telephone. Should a teller find himself locked in, he communicates with the outside by telephone, and he is then instructed how to use the tools to disconnect the time clock, and the door may then be opened.

The Watchman

A bank is never without human as well as mechanical protection. Armed watchmen are always on guard in the lobby of large banks during the day, and at night all banks are so protected, except perhaps in the smaller country or outlying banks. Usually the night men are charged with cleaning the bank room in addition to their other duties. Should an attack be made, private wires may be used to call assistance, or an alarm can be sounded on a gong placed somewhere on the outside of the building.

Tellers' Cages

All tellers who handle cash are protected by a cage which entirely incloses them. A favorite method adopted by daylight bank sneak thieves is to distract the attention of a teller while a confederate "fishes" over the top of the counter for packages of bills. Therefore most cages are inclosed at the top. There is a button placed out of sight, but within reach of the teller as he stands

at his counter, by touching which he may sound an alarm. Loaded revolvers are also at hand at all times. The door of the cage is kept locked, and no one but those authorized have access to the cage during the day. Thus any shortage in cash can be traced within definite limits. A clerk who might enter the cage without permission would immediately be dismissed.

Outside Protection

The messengers and runners who must carry cash or securities upon the streets, invariably are properly armed. If a package of unusual value is carried, two men will be sent out and the satchel will be locked to the wrist of one of them. The ordinary wallet used by a runner is attached to a chain passing around his shoulder beneath his coat. Packages containing money to be sent by mail or express are sealed by two men after being counted and checked by a third. If a heavy shipment of coin is made, in addition to the armed men who carry it or accompany the vehicle in which it is hauled, two or more armed clerks follow at a short distance on each side of the street. In New York City further protection is provided by a police regulation which bars all known criminals from a fixed district or financial section in which a vast amount of money is transferred daily.

Millions of checks, representing the transfer of billions of dollars of credit, are carried through the mails daily from debtor to creditor, depositor to bank, and from bank to bank with no especial protection provided for or even necessary. The ease and economy with which these convenient substitutes for cash may be handled enable the banks to render a service which is scarcely appreciated. The dispatch and receipt of ordinary mail matter is carefully checked, however, and

should the package contain bonds, coupons, currency, or other negotiable matter, the letter will be sent by registered mail insured. Banks carry a special form of insurance which protects them against any ordinary kind of loss due either to fraud or to criminal attack. The protective department of the American Bankers' Association spares neither time nor money in apprehending anyone who defrauds a member bank, and the membership sign which is prominently displayed in the banking room is an effectual deterrent to the criminally inclined.

Preservation of Records

As a matter of caution and, to a certain extent, of law as well, all accounting records are carefully preserved for a number of years. Ledgers and other books in which the main transactions affecting controlling accounts are entered, are never destroyed except by accident. To guard against this the records are stored away either in the basement or in specially constructed fireproof rooms. The most valuable are placed in the main vault. The annals of many an industry are written upon the records of the bank in which the account was kept, and in case of litigation the books often become a part of the court records.

General Regulations Affecting the Clerks

In small banks having but few employees it is customary to require each man to furnish an individual bond in an amount based upon the responsibilities which he assumes. In larger institutions a "blanket bond," which covers all its employees and officers, is provided by the bank. Men of good character and clean habits only are accepted for bank work. No matter what safe-

guards are thrown about them, the men must be trusted beyond that point which carefully planned accounting systems and official supervision cannot go. To their credit be it said that the annual loss through dishonesty is negligible compared with the total number of men engaged in banking and the enormous annual volume of transactions involved. In a recent address, the educational director of the American Institute of Banking said: "We have sixteen thousand members and so far as I know, only two of them are in jail—a record considerably better than that of the twelve disciples."

Bank work, accepted views to the contrary notwithstanding, is not easy. The men, officers, and clerks are at their desks long before nine in the morning, and the average time of finishing the day's work is about five in the afternoon. In the large cities the hours are frequently much longer. A two weeks' vacation is allowed, with a longer period granted after many years of service. It is a general custom in the East, and also in some of the larger banks in the West, to provide lunches for the force within the building. This is done not so much as a matter of generosity as to insure efficiency and constant attendance to the work of the bank, which cannot be closed down for an hour, as is the case with the shop or factory. It is necessary also to have a certain degree of elasticity in the force to provide against absence. Many banks employ "summer clerks," usually recruited from schools and colleges. In small institutions the son of the president or of a director, home from college, may spend a month or two in the bank, thus preparing himself in a practical way for business, while the regular clerks are enjoying their annual holidays in turn.

Women are being employed more and more in clerical positions, especially for adding machine work. There is considerable difference of opinion among bankers as to their value as compared with men. It is true that the

maximum salaries paid to women are less than those of men in similar positions; on the other hand, the women cannot be depended upon to develop into bank officers, although there are many women cashiers and even presidents of banks. The average salary at which a young bank clerk begins is $300 per annum. Bookkeepers range from $800 to $1,500 and tellers from $1,000 to $4,000. These figures, of course, are only general, and it is not unusual to find a bookkeeper in a large bank who is paid a better salary than the cashier of a smaller institution. Cashiers, presidents, and department heads of large banking institutions often enjoy very lucrative salaries and incomes.

Accuracy is the first consideration in judging the ability and worth of a bank clerk. Speed is next. It is not uncommon to find a bookkeeper who will go through an entire month without having made an error in posting a figure or in adding or subtracting. On the other hand, some clerks are not able, apparently, to "write up" a list of checks on the adding machine without making at least one mistake. A studious mind, ability to think and act quickly, and a pleasing personality are also requisites. Clerks having these qualifications are in demand in all banks and are assured of a successful career. Courtesy to customers and the ability to hold business matters in confidence are two rules which all banks require of their employees.

Notwithstanding the exacting requirements of a successful banking career, banking is a highly interesting field of work. It is a dignified calling. It brings a man in intimate relations with the live events of current business, with the operation of fundamental economic forces, with social progress, and with international events. It challenges the best that is in a man in the way of ability, power, and character. Such a man may find in banking the opportunity for a lifetime of service.

TEST QUESTIONS

1. Has the banking profession an atmosphere or is it without its traditions, etc.?
2. What are some points that should be noted concerning the bank vault?
3. How should the tellers' cages be protected?
4. How should the records be safeguarded?
5. What are some of the qualities that should be present in a bank clerk to make him successful in the banking field?

CHAPTER XII

TRUST COMPANIES AND SAVINGS BANKS

Banks are generally classified in three main groups:

1. Commercial.
2. Savings.
3. Trust.

It would be more exact to say that there are in general three kinds of banking, because one bank may, and often does, transact these different kinds of business under one roof. National banks are essentially commercial banks, yet many of them conduct savings departments, and the Federal Reserve Act permits them to act as trustee, executor, registrar, etc.—trust company functions—when not in contravention of state laws. State commercial banks are like national banks in these respects.

Deposits in commercial banks may be made up largely of loans; or, to put it differently, there are deposits of credit as well as deposits of money. In the sense that deposits of cash are deposits of money that has been "saved," all banks may be said to be institutions for the receipt and safeguarding of savings. This use of the word "savings" is, therefore, quite common in bank names, although a bank using the word in its title may in reality be a commercial bank. In the state of Iowa the law provides for the organization of two kinds of banks—"state" banks and "savings" banks, and the designation "savings" is required by the code. Inas-

much as there are certain advantages to be derived in organizing under the savings part of the code, we find many savings banks, so called, in Iowa which are in point of fact ordinary commercial banks.

It is not always possible to determine from its title the kind of business a bank may transact. Thus reference to a bank directory will disclose the fact that nearly every state has some distinctive grouping or division of its banks. In Massachusetts a bank is a "national bank," a "trust company," or a "savings bank." One of these terms will be found in connection with every bank in the state, yet in the majority of cases the trust companies are ordinary commercial state banks with the privilege of doing trust business if they so desire.

Throughout the greater part of the United States, trust and savings bank business is conducted in one institution, but in the eastern section north of Virginia, nearly all the savings banks are conducted strictly as their titles would indicate, and for the most part they are without capital stock. The trust companies, although they accept active checking accounts, depend largely upon their legitimate trust business for a livelihood, but elsewhere the "trust and savings bank" is a title commonly met with.

Trust Companies

A trust is anything of value, such as money or personal property which is committed into the care of another for the safekeeping, use, or benefit of the owner. This implies confidence on the part of the owner in the integrity and reliability of the person trusted, who is called the "trustee." Trustees are appointed because those who have property either cannot or, for one reason or another, prefer not to act for themselves. Thus, while all banks are in a broad sense trustees for their

depositors in that they care for the deposits of their customers, a certain group of banks are organized primarily for the purpose of administering trusts and acting in a fiduciary capacity generally.

Trust companies are of comparatively recent origin, and they are the newest of the three great groups of banks. The step in their development or evolution has not been from the bank to the trust company, but from the individual trustee to the corporate trustee or trust company. In the early days of the country, individuals assumed the obligation of trustees for other individuals, and in fact this custom still obtains, especially in sparsely settled districts. As men have become more wealthy and as accumulations of property have increased, there has arisen the need for some organized and sufficiently trained body of men who could administer the estates and affairs of other men, whether living or dead. There are many reasons why the trust company is better fitted than the individual to perform the functions of a trustee. The individual trustee may die, or move away, or become incapacitated through illness or lack of knowledge of the law. A trust company may be said to be perpetual; it is managed by men who are trained both in law and in finance, and who give their entire time to this particular business.

FIDUCIARY FUNCTIONS

Trust companies act not only for individuals, but also for societies, corporations, and municipalities. Their principal functions are to act as:

Executor of wills.
Administrator of estates.
Guardian of minors.
Agents for individuals.

Depository for escrows.
Trustee under mortgages.
Transfer agent and registrar for corporations.
Fiscal agent for governments, states, and muncipalities.
Receiver for firms and corporations.

In addition to these general fiduciary functions trust companies frequently supply special timely services, such as making out income tax certificates, etc.

As executor or administrator, they administer the estate of the deceased according to the law, and the fees for such services are fixed by law at the same rates as individuals are permitted to charge for like services. As agents for individuals, they may care for property, collect rents, pay taxes, assessments, and insurance, and perform whatever other duties they may be charged with. As trustee under mortgages, the trust company safeguards the interests of the mortgagee and forecloses the mortgage if principal or interest is unpaid at maturity. This particular feature of the trust company's business is usually confined to acting as trustee under a bond issue which is secured by a mortgage upon corporation property. As transfer agent and registrar, the trust company certifies as to the genuineness of either a stock or bond issue and records all transfers of such stocks or bonds. The company does not guarantee the payment of bonds or of dividends upon stock; it merely vouches for the regularity of issue and the validity of the transactions involved. As fiscal agent for civic divisions, money is collected and disbursed upon warrants and in the payment of interest on bond issues, etc. In addition to the above, trust companies act in various other capacities of a similar nature. Figures 80, 81, 82, and 83 give typical record sheets for the trust company functions there indicated.

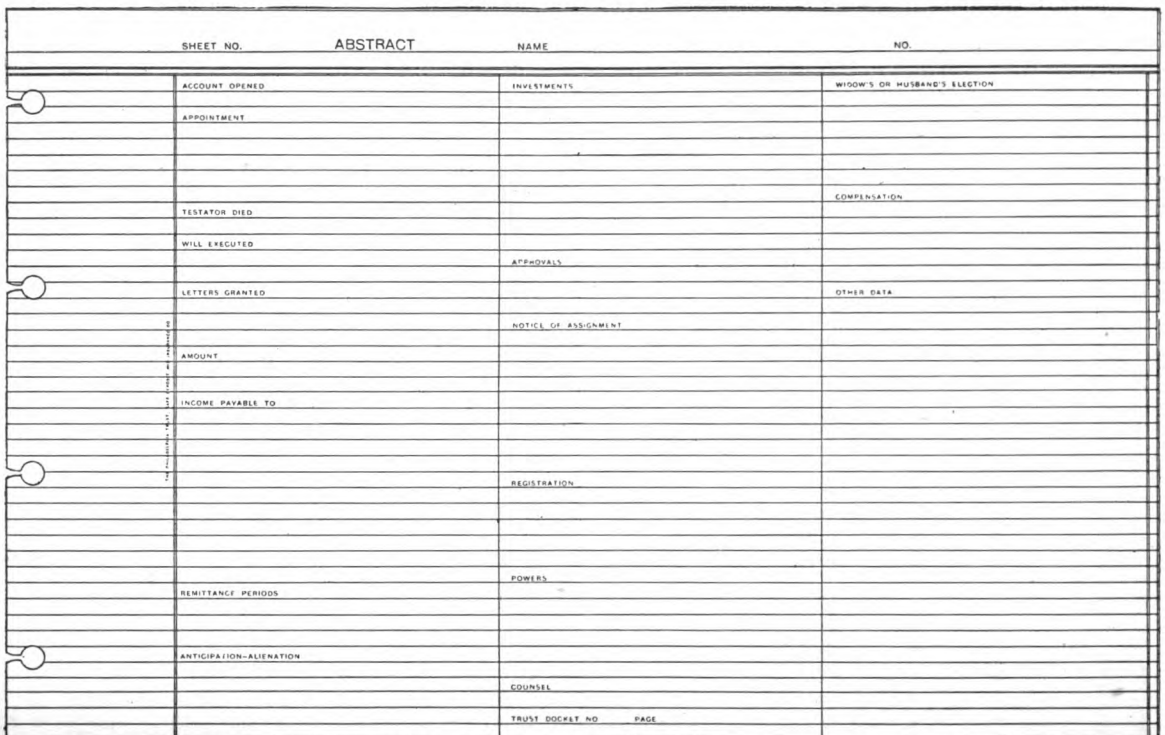


FIG. 80.—Trust Account Register or Abstract

The permanent record of trust accounts, showing in detail all the data required in the proper handling of trusts.

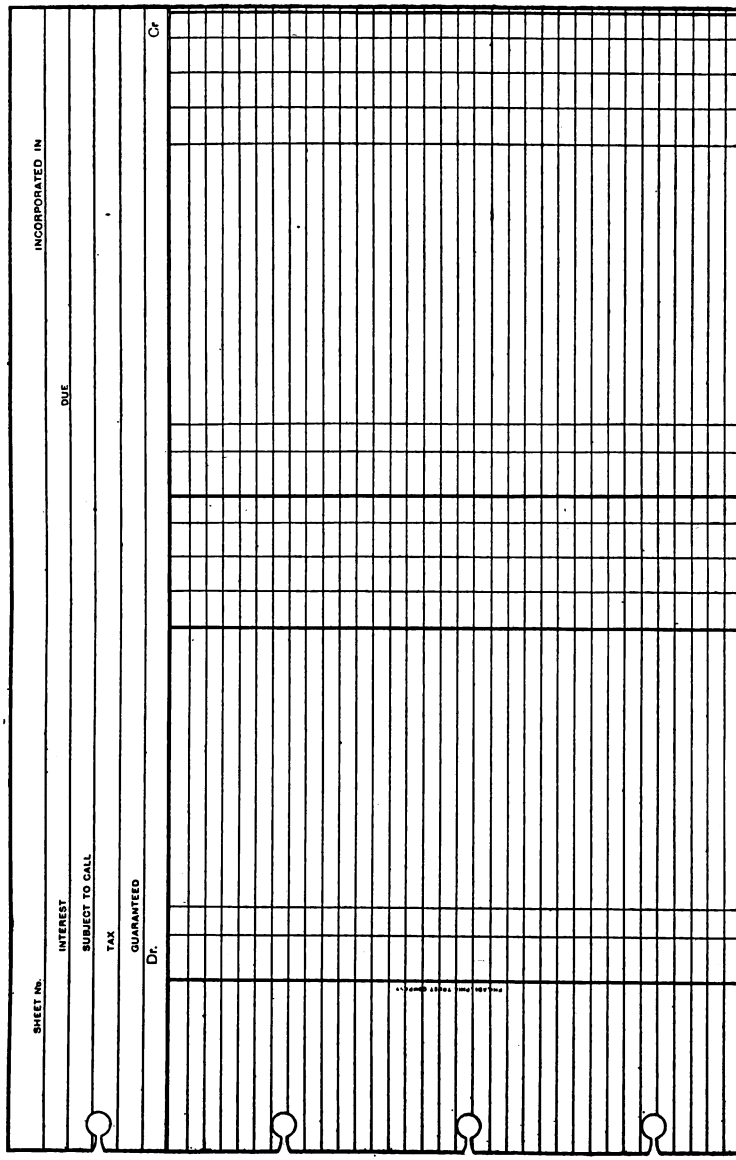


FIG. 81.—Bond and Investment Record

Record of securities held in trust. A sheet is maintained for each particular security, showing exact amount invested for the respective accounts.

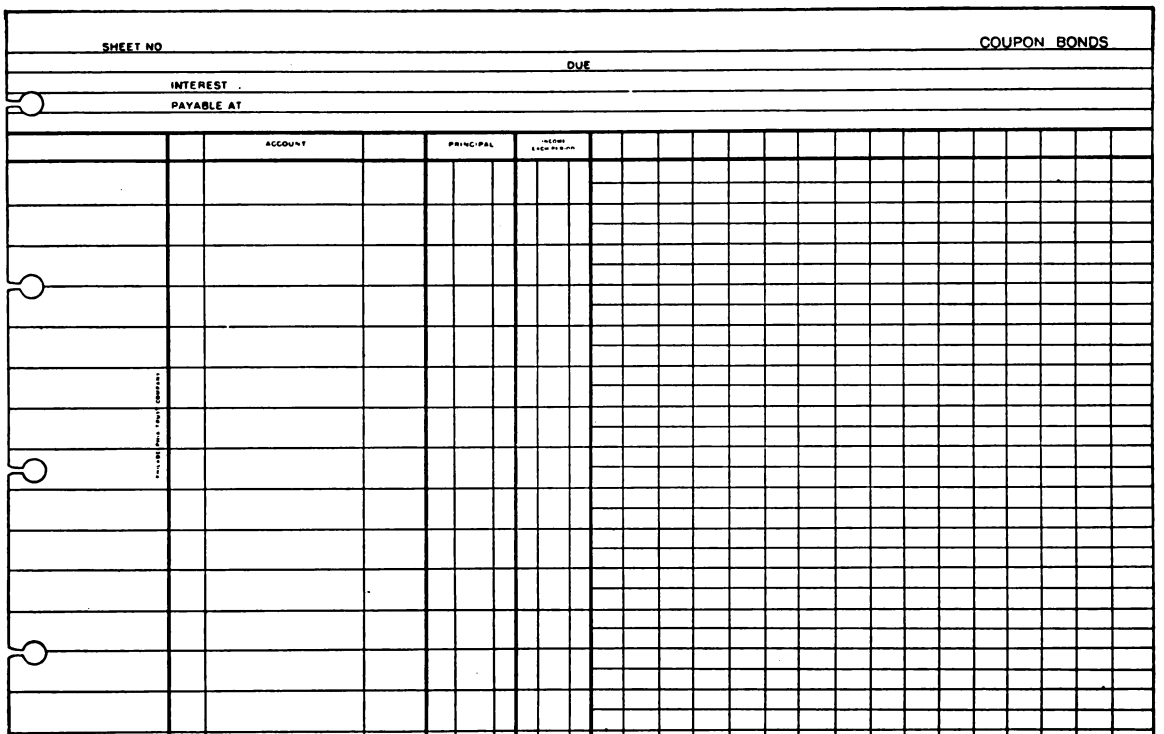


FIG. 82.—Record of Income Collections

Under title of "Bonds" is kept a record of interest payments made to trust accounts as shown by principal invested.

BANKING DEPARTMENT

The banking department of a trust company is conducted like any other bank. Deposits are received subject to check, interest is allowed on savings deposits, and in practically every particular this branch of the business is the same as that of the ordinary bank of deposit and discount. It issues letters of credit and travelers' checks and buys and sells drafts in foreign exchange. Tellers receive and enter deposits, pay checks, and collect drafts and notes; bookkeepers keep ledgers and make credit and debit records just as the work is done in any other bank, and similar books and systems of accounting are used. In Minnesota, Michigan, and Wisconsin, trust companies are not permitted to do an active banking business, but are restricted to the handling of trusts and other fiduciary matters. As to loans and investments permitted trust companies, state laws differ, but the general statement is true that they employ their funds just as do the commercial state banks.

It is chiefly in the trust department that the functions of a trust company are distinctive. The estates and funds of both the living and the dead are cared for by this department. The organization of the trust department is kept separate from that of the banking department. As money is received by the trust department representing the income from property or investments of funds held in trust, it is deposited in the banking department and is checked against by the trust department as if the department were an outside depositor or customer. It would be possible for either department to exist without the other, so far as the operation of their respective functions is concerned.

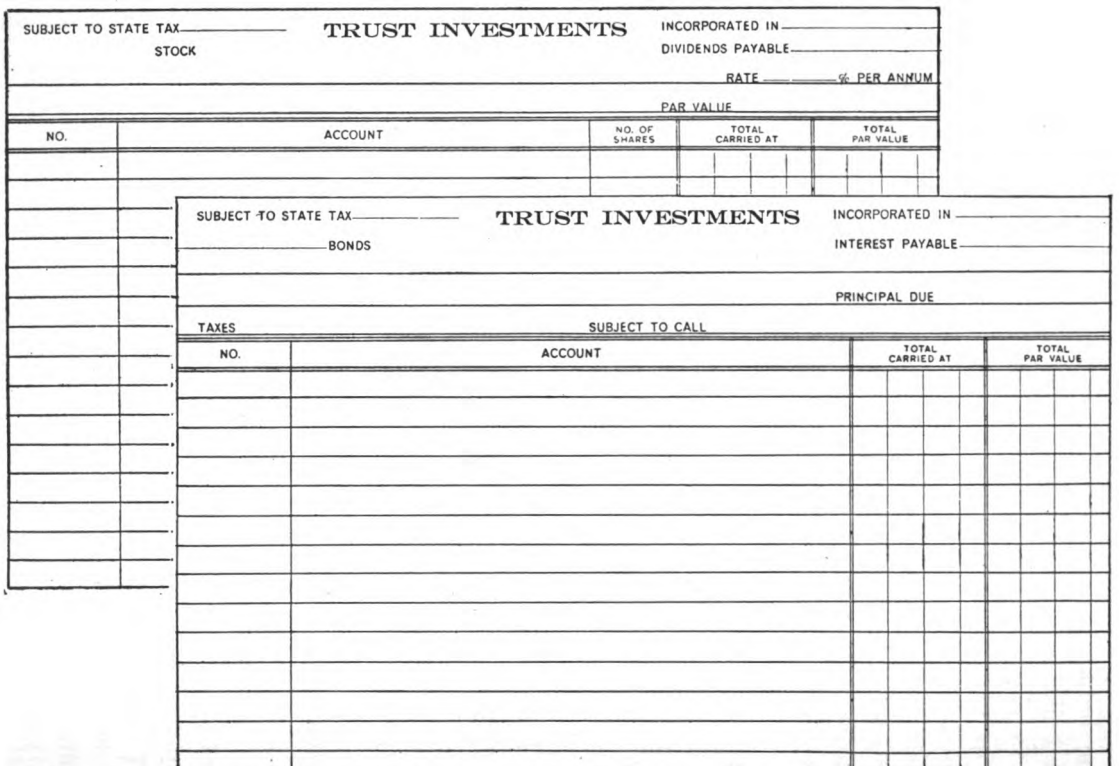


FIG. 83.—Trust Investment Card Records (Front)

Record of stock and bond investments and amount held for respective accounts. Affords a ready reference in following market fluctuations and showing to what extent each trust is involved.

MARKET VALUE					
DATE	PRICE	DATE	PRICE	DATE	PRICE

FIG. 83.—Continued (Back for Both Forms)

Savings Banks

Savings banks, in the strict meaning of the term, are banks organized to receive the savings of depositors, to invest them in loans and securities of the very safest kind, and to pay the depositors a fair rate of interest. The relation between the savings bank and its customers is of a close and confidential nature. The depositors are, for the most part, of the poorer classes, the working people, and the thrifty of both sexes and all ages, who seldom accumulate enough money to invest it for themselves, even if possessed of sufficient business judgment to warrant their doing so.

We find that both the laws of the state and the rules of savings banks throw every possible safeguard around the savings bank depositor. In many states, not only are savings banks restricted as to the kind of investments they may make, but the law even goes so far as to designate a list of specific securities which are classed as "legal investments for savings banks and trust funds." The two most common forms of investments for savings banks are mortgages upon real estate, preferably homes, and bonds. Among the latter, railroad, municipal, or civic bonds are given the preference, since the margin of safety is greater. Such investments are possible, since savings deposits are of a permanent nature.

The savings bank is the depository for money laid by for a "rainy day," old age, sickness, and similar needs. Parents open accounts for their children, partly to teach them the habit of thrift, partly to defray the expenses of education. The young married couple will deposit the funds resulting from little household economies that they may build themselves a home, and there are thousands of savings accounts, the owners of which may have no other definite purpose in mind except the instinct to

save, which is natural to the normal human being, a habit that man has in common with other creatures of the earth.

There are two kinds of savings banks in the United States—the stock savings bank and the mutual savings bank. The stock savings bank, as the term implies, has capital stock and is organized for profit. The mutual savings bank, found almost exclusively in the section east of Ohio and north of Virginia, has no capital stock, the profits belonging to the depositors and being paid to them as interest upon balances. The stock savings bank has a board of directors, and the affairs of the institution are managed very much along the lines of the average commercial bank. The mutual savings banks are managed by a board of trustees, which is a self-perpetuating body chosen for their integrity and standing in the community. Of the two, the mutual banks are by far the larger, there being at least four with deposits of over one hundred millions of dollars.

The postal savings bank system, conducted by the Post-Office Department, is a concession to those who, for one reason or another, do not trust banks. Money that would otherwise be hoarded is put into productive channels through the operations of the postal savings system.

SAVINGS BANK ACCOUNTING

Savings bank accounting differs from other bank accounting only to the extent that the business is conducted with a different class of depositors, whose needs are not the same as the needs of the business man and the merchant. Savings accounts, because they are comparatively inactive and small as compared with commercial accounts, are usually recorded upon ledgers and other records by number. The form for such a ledger appears in Figure 84. Savings bank balances are not

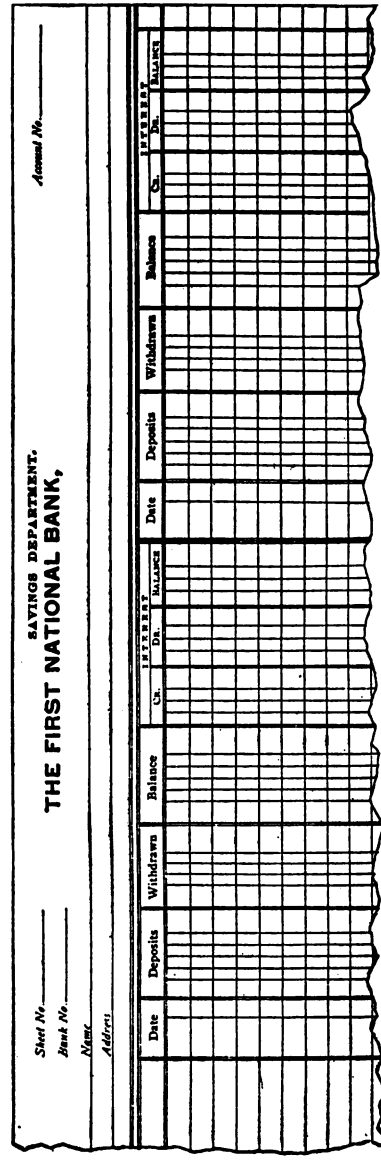


Fig. 84.—Ledger—Savings Account

subject to check as a rule, nor could they very well be, since the investments of the bank are not sufficiently liquid to permit withdrawal without due notice. Some banks have a fixed rule requiring two weeks' notice before money may be withdrawn; others pay upon the presentation of the pass book; but practically all of them reserve the right to take advantage of the law, when necessary, which permits a savings bank to demand sixty days' notice of the withdrawal of funds.

The pass book used by a savings bank is used as a

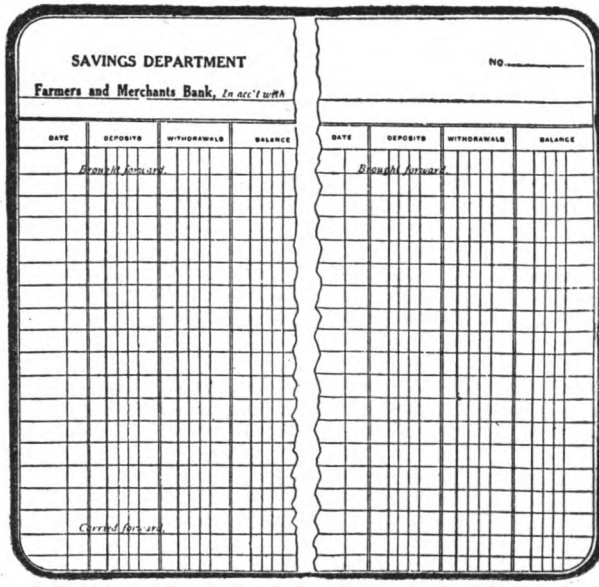


FIG. 85.—Pass Book—Savings Account

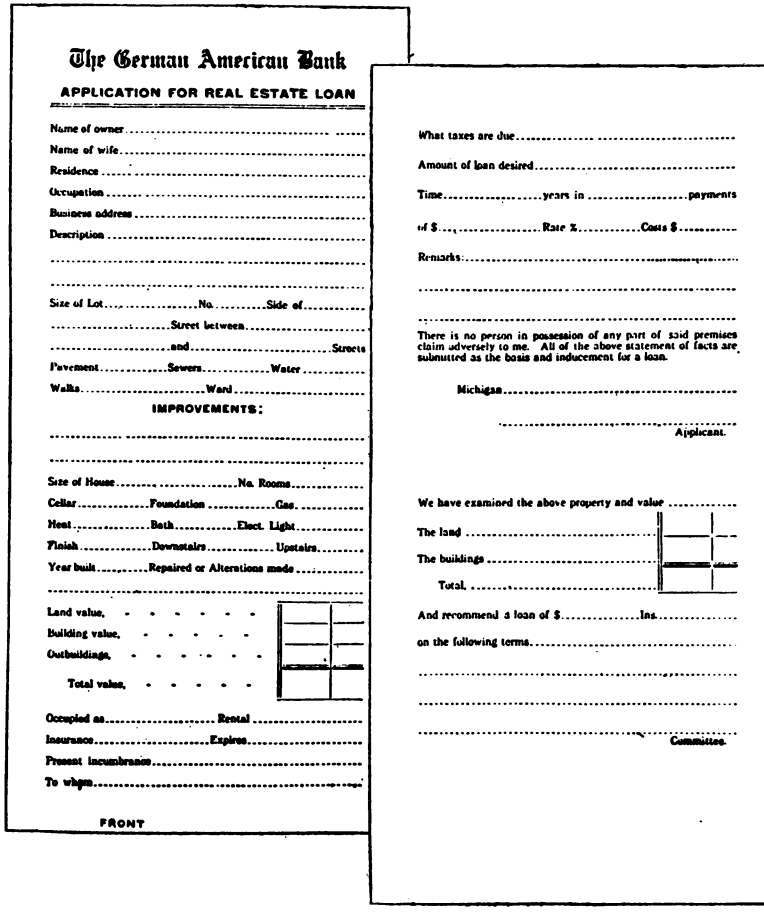
voucher or receipt, both for money deposited and for money withdrawn. It is also evidence of the contract between the bank and the depositor. The pass book must always be presented when money is withdrawn, as the depositor is required to identify himself, not only by possession of the book, but by his signature and his ability to answer test questions, for example, his moth-

er's maiden name. The bank is not required by law to be familiar with the signature, except that it is a means of identification. Many of the depositors may be illiterate, or they may be children whose handwriting undergoes rapid changes; consequently, many savings banks use the finger-print method of identification. These precautions are necessary to prevent the payment of money to imposters who may have got illegal possession of a pass book. In order to prevent depositors from using the bank as a temporary depository for idle funds, there is usually a limit placed upon the amount anyone may deposit in a single year, and balances over a certain amount—$3,000, for example—do not draw interest.

MORTGAGE LOANS

Savings banks specialize in mortgage loans which are secured by real estate. A mortgage is a conditional deed conveying the property of the mortgagor—the borrower, to the mortgagee—the bank. The instrument is conditional in that it is void if the borrower meets the conditions imposed, viz., the payment of interest and principal when due. The papers incidental to a mortgage loan are as follows: (1) the note or bond which is the evidence of debt; (2) the mortgage duly executed, which is the security; (3) the abstract of title, which indicates that there are no prior liens against the property; and (4) the insurance papers, which protect the bank against loss if the mortgaged property is destroyed by fire.

In applying for a mortgage loan, the applicant describes the property and states the amount of money desired. The value of the property is then estimated by the bank's appraiser, while an attorney or a title insurance company makes a "search" to determine if the owner's title is "clear." Only first mortgages are permitted as investments by savings banks. The amount



The German American Bank

APPLICATION FOR REAL ESTATE LOAN

Name of owner .....
Name of wife .....
Residence .....
Occupation .....
Business address .....
Description .....
.....
.....
Size of Lot ..... No. ..... Side of .....
..... Street between .....
..... and ..... Streets
Pavement ..... Sewers ..... Water .....
Walks ..... Ward .....

IMPROVEMENTS:

.....
.....
Size of House ..... No. Rooms .....
Cellar ..... Foundation ..... Gas .....
Heat ..... Bath ..... Elect. Light .....
Finish ..... Downstairs ..... Upstairs .....
Year built ..... Repaired or Alterations made .....
.....

Land value, - - - - - - -
Building value, - - - - - -
Outbuildings, - - - - - - -
Total value, - - - - - -

Occupied as ..... Rental .....
Insurance ..... Expires .....
Present incumbrance .....
To whom .....

FRONT

What taxes are due .....
Amount of loan desired .....
Time ..... years in ..... payments
of $ ..... Rate % ..... Costs $ .....
Remarks: .....
.....
.....

There is no person in possession of any part of said premises claim adversely to me. All of the above statement of facts are submitted as the basis and inducement for a loan.

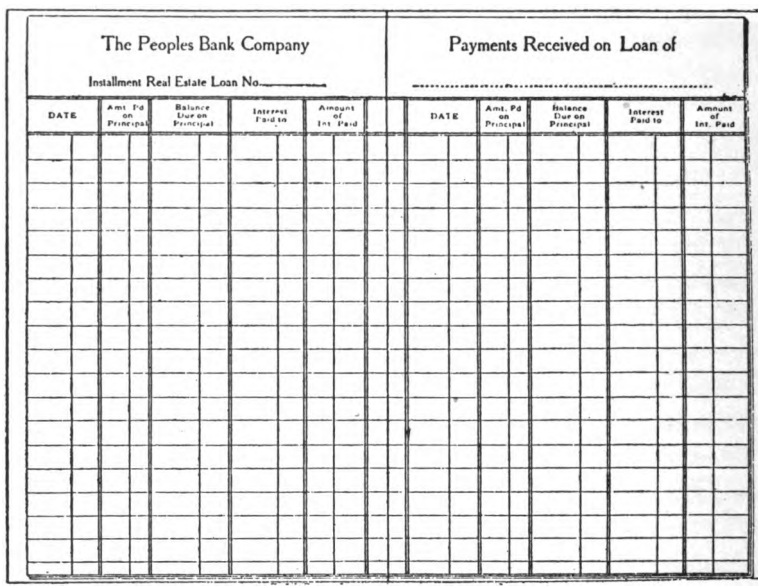
Michigan .....
.....
Applicant.

We have examined the above property and value .....
The land .....
The buildings .....
Total .....
And recommend a loan of $ ..... Ins .....
on the following terms .....
.....
.....
.....
Committee.

FIG. 86.—Application for Real Estate Loan (Front and Back)

of money that may be loaned is also limited by law, varying from 50 per cent to 60 per cent of the appraised value of the real estate. The essentials of security in a mortgage loan consist of such considerations as the upkeep of the property, its location with respect to transit facilities, chances of depreciation in neighborhood values, adaptability of buildings for more than one use, etc.

As a banking problem, mortgage loans offer an interesting field for investigation and discussion. How is it that loans based upon the best security in the world, improved real estate, cannot be so regulated as to permit commercial banks to invest in them? The arguments against such loans by commercial banks are that they cannot be readily converted into cash in case of


The Peoples Bank Company

Installment Real Estate Loan No._____

Payments Received on Loan of .....

DATE	Amt. Pd on Principal	Balance Due on Principal	Interest Paid to	Amount of Int. Paid	DATE	Amt. Pd on Principal	Balance Due on Principal	Interest Paid to	Amount of Int. Paid

FIG. 87.—Installment Real Estate Loan Record

need, that they are for long periods, and that in case of foreclosure there is a considerable amount of time lost in the legal proceedings involved. For these reasons, national banks have not been permitted to loan money upon real estate mortgages. Recently they have been given permission to make such loans subject to certain restrictions provided under the Federal Reserve Act. The difficulty has been that mortgage loans have been allowed to drift into the class of permanent investments. Provided the security is good and the interest

has been paid promptly, the banks have been content to allow the loans to run. The borrower, instead of paying off his mortgage loan when he is in funds, has thus been tempted to invest in more property and to pay back the loan only when he sells the property that has been mortgaged. Abroad, the borrower begins to pay back the loan in installments at each interest period, the result being that mortgage loans are as liquid an investment as are bonds in this country.

BONDS

As has been stated, certain bond issues are designated by law in many states as legal investments for savings banks. While municipal and railroad bonds are given the preference, it does not follow that all bonds of these classes are acceptable, nor that the discrimination is made along arbitrary lines. Railroads must measure up to a high standard of efficiency and management before their bonds may be designated as legal investments for savings banks. So also with the bonds of a city or state. The total bonded indebtedness of the city must not exceed a certain percentage of the value of taxable property.

The accumulation of a reserve or surplus by a savings bank is very essential. Conforming to the accounting principle that both sides of the statement must always balance, the bank must have a dollar of assets for every dollar of liabilities at all times. The market values of the investments of savings banks, consisting largely of securities, are subject to fluctuations; hence it is necessary that a margin of safety shall be provided in the surplus fund which is created out of the earnings.

Bonds are rarely bought at par value; if the interest paid is fairly high and the security is very good, bonds will sell at a premium. Let us suppose that an issue of bonds is bought by a savings bank as an investment at

105. This means that each $1,000 bond has cost $1,050. When the bonds fall due, the savings bank will not get back $1,050 for each bond, the price paid, but $1,000, or par. How, then, shall the savings bank account for this apparent loss of $50 on each bond? Out of the interest. At each interest period, or once each six months—the interest coupons being usually paid twice yearly—a part of the income is applied to the premium that was paid for the bond, so that by the time the bond matures, the entire premium of $50 is restored. The process by which this is accomplished is called "amortization." The same principle is applied, but with reverse effect, when a bond is bought at a discount or at a lower price than par.

THRIFT CONSERVATION

Enough has been said of savings banks, their purpose and their methods of receiving deposits and making loans, to indicate that they perform a very important service in the business world. They accumulate the small savings of the multitude of wage earners, money which, if hoarded or squandered, would be of use to nobody. Through the loaning power that savings banks acquire, the result of the thrift of their depositors, men are able to borrow money with which to build and own their homes. The homeowner is a much more valuable member of society than the man who owns no property. These same savings that have come out of wages are often turned back into the very business or industry that has produced them through loans made by savings banks. If there were no funds to purchase bonds, there would be little industrial or civic development in the shape of railroads, telephone, electric lights, reservoirs, sewage systems, schools, and a hundred other modern conveniences that not only add to our comfort and pleasure, but also furnish employment for thousands.

Thrift, then, is more than an abstract virtue; it is an economic necessity. Men who are thrifty are usually industrious, self-respecting, sober, and law-abiding. Hence we find that the savings banks are beginning to spread thrift propaganda through advertising and in other ways, not only because it helps their business, but because it has a tendency to raise the standard of the people in general. Schools are installing savings systems that make it possible for very young children to open savings accounts. They are thus not only taught the value of the saving habit at an early age, but they become familiar with banking methods.

TEST QUESTIONS

1. In what section of the United States has the savings bank's function been the performing of a pure savings bank business? Do trust companies generally engage in the banking business?
2. What are the functions of a trust company?
3. What system has been devised by the government to bring forth savings which have been hoarded?
4. Wherein does the accounting method of the savings bank chiefly differ from the accounting method of the general commercial bank?
5. For what class of banks is the mortgage loan a desirable investment?
6. Why is it not desirable for the commercial bank? What is the attitude of the Federal Reserve Act toward the mortgage loan?
7. What bonds are usually designated by law as acceptable for investment by savings banks?
8. What is meant by the term "amortization"? Is the principle applied to bonds purchased below par?
9. What is the importance of thrift? How is it related to banking and community prosperity?

CHAPTER XIII

THE CLEARING HOUSE

The principle of offset, that is, the application of credits to debits and the settlement of any balance remaining, as applied to banking is defined as the clearing principle. Economically it is an evolution of the ancient system of barter by which goods were exchanged for goods, the trade being made even by giving something "to boot," that is, to equalize any difference in the value of the goods exchanged.

In money exchanges this principle is not involved, since the amount of money given can always be made to equalize the value of the goods taken. As soon as negotiable instruments or substitutes for value are employed, this inequality of exchange must again be provided for, as is the case with original barter, except that money instead of some other commodity is used to make the trade equal.

History

The clearing principle now in operation between and among banks must have been employed as early as the general introduction of bills of exchange into the commercial world. The origin of the first clearing house in the modern sense is, however, clouded in some obscurity. London claims the distinction of having the original bank clearing house, which was organized about the year 1773. It was the custom of the early London

banks to send messengers from one to the other, presenting checks and other bills payable at their respective counters for payment in money. Two of these messengers, so the legend goes, formed the habit of meeting daily at a convenient coffeehouse, where they would exchange their items, paying the difference with cash which they had brought along for the purpose. Although this plan saved considerable time and the handling of much money, the characteristic dislike of the conservative English banker for anything varying from established custom asserted itself, and the offending clerks who had thus violated precedent were properly disciplined. The merits of the idea having finally prevailed, the London Bankers' Clearing House was established, and it is said to be the first such exchange conducted in a building set aside exclusively for that purpose.

Owing to the unsettled state of finance and the lack of a coherent banking system, it was not until 1853 that the first clearing house was established in the United States, the New York Clearing House having been founded in that year. Albert Gallatin, an eminent financier, had proposed such an organization many years earlier, but without success. Similar associations were formed in other large cities; immediately after the National Bank Act had taxed state bank-note issues out of existence (1863-64), the deposit-and-check system of banking brought into general use so large an increase of personal checks that clearing houses multiplied very rapidly. The so-called "Suffolk system" used by the Boston banks from 1818 to 1864 was a clearing plan adopted to facilitate the exchange and redemption of New England state bank notes, but its functions and methods were not those of the true clearing house in the generally accepted meaning of the term.

Clearing of Checks

The clearing house is a plan, rather than a tangible entity, although in one sense the term is used to designate the building in which the actual exchanges take place, and in another, the voluntary association of the banks which comprise the membership. As between any two banks, there will be a simple offset of checks which each holds against the other, payment of the difference or balance being either deferred and included in the following day's transactions or else settled daily in cash. When three or more banks are involved, and the offset is accomplished through a clearing house, the operation of exchange is identical, except that each member bank assumes in accounting that all checks payable by its neighbors are drawn upon but one factitious institution—the clearing house, and the bank in turn receives all checks on itself from the same source. This result is accomplished by putting all checks on each other member of the clearing house in separate packages and listing each total on the credit side of a sheet opposite the name or clearing-house number of the bank on which they are drawn. The grand total is then recorded on the bank's books as "exchanges for the clearing house."

At a fixed time all the banks meet at the clearing house through their representatives, who exchange the packages, one clerk moving around the outside of a series of desks, each of which is occupied by another clerk from the bank whose clearing-house number is shown on a brass plate. This clerk records in the debit column the amount of each package of checks received from the distributing messengers. The result is that while each messenger has come to the clearing house with checks on every other member, he returns with

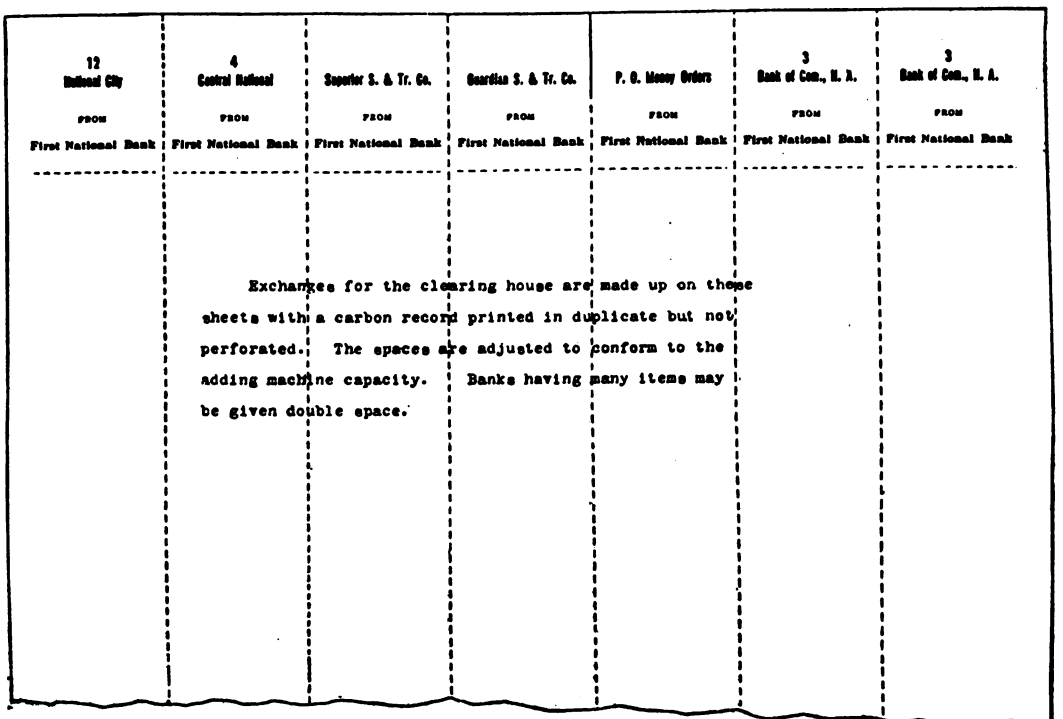


FIG. 88.—Exchanges for the Clearing House

checks on his own bank only, and this without having made a visit to each institution.

The difference between the total amount brought to and taken away from the clearing house is the balance, and since the mere exchange of the items does not alter the sum of them, the total debit balances due to the clearing house by the members who have brought less than they have received must equal the sum of the credit balances which the clearing house owes the members who have brought more than they have received. This casting of total debit and credit balances is done by the manager of the clearing house and is the proof of the correctness of the exchange. With the exception of the manager, who may be an officer of one of the member banks, all the clerical work at the clearing house is done by the bank clerks who make the exchanges. The exchange of the packages and the subsequent accounting consume very little time; ten to fifteen minutes is sufficient to list the totals and strike the balances. Figure 89 represents a clearing-house settlement sheet. All the necessary information is condensed in convenient form.

Settlement of Balances

A few hours are allowed the banks after the exchange has taken place for the settlement of balances. The general hour for the exchange is 10 A. M., and at noon all debtor banks must pay their balances in acceptable funds to the manager of the clearing house. At 1 P. M. all creditor banks send to the clearing house and receive payment for their credit balances. Unpaid items are accounted for directly between the two banks involved and are not returned through the clearing house. The clearing house acts merely as the agent for the debtor banks and is not liable in any way for the payment or genuineness of the checks which have been exchanged.

THE PHILADELPHIA CLEARING HOUSE ASSOCIATION.

No. 1 THE PHILADELPHIA NATIONAL BANK 1917.

SETTLEMENT SHEET

Balances of Debtor Institutions.	Amount Received	No.	MEMBERS.	Amount Sent	Total Credits.	Balances of Creditor Institutions.
		1	PHILADELPHIA.			
		2	NORTH AMERICA.			
		3	FARMERS & MECHANICS.			
		4	FEDERAL RESERVE.			
		7	SOUTHWARK.			
		8	KENSINGTON.			
		9	PENN.			
		13	GIRARD.			
		14	TRADESMENS.			
		18	CORN EXCHANGE.			
		19	UNION.			
		20	FIRST.			
		21	THIRD.			
		23	SIXTH.			
		25	EIGHTH.			
		26	CENTRAL.			
		28	SECURITY.			
		29	CENTENNIAL.			
		33	NINTH.			
		34	TENTH.			
		36	NORTHWESTERN.			
		37	SOUTHWESTERN.			
		39	FOURTH STREET.			
		40	MARKET STREET.			
		42	QUAKER CITY.			
		43	NORTHERN.			
		44	FRANKLIN.			
		45	TEXTILE.			
		46	LAND TITLE & TRUST.			
		47	REAL ESTATE TITLE.			
		48	GIRARD TRUST.			
		49	WEST PHILADA. TITLE.			
		50	PHILADA. TRUST.			
		51	PROVIDENT LIFE.			
		52	PENNSYLVANIA CO			
			CLEARING HOUSE.			
			AGGREGATE.			
			BALANCE			

FIG. 89.—Clearing House Settlement Sheet

Thus in a few minutes' time vast numbers of checks representing millions of dollars are presented and later settled for with the necessity of little actual money. The ratio of balances to clearings depends upon the relative size of the banks which make the exchanges, and as a general average for all clearing houses it may be set down at about 10 per cent. In New York City, which has the most notable clearing house in the country, the average extending over a period of years is less than 5 per cent.

Various methods are used in settling balances, the object being to avoid as far as possible the use of money. Thus drafts may be used by the debtors, which the manager of the clearing house deposits with one member, drawing his own drafts against this deposit in favor of the creditor banks. In many clearing houses actual currency is used, but in others, gold and other money is deposited in the vaults of the clearing house, and certificates similar in nature to warehouse receipts are issued in denominations of $5,000 or more. By using these certificates, which cannot be negotiated except by member banks, counting and recounting large sums of money is avoided; nor is there danger of loss in carrying the money through the streets.

Federal Reserve Banks as Clearing Houses

In acting as clearing houses for their members, as the federal reserve banks are required to do under the terms of the Federal Reserve Act, the same accounting principles are employed, with due allowance for the fact that the member banks are separated within their own districts by at least one day's mail time from their clearing house, in this instance the reserve bank. The checks are sent by mail instead of by messenger as in

the case of a local clearing house, and the balances are adjusted by debits and credits to accounts with the reserve bank.

The twelve federal reserve banks also use the clearing principle in making settlement with one another through the operations of a Gold Settlement Fund held at Washington under the supervision of the Federal Reserve Board. Each reserve bank keeps a portion of its gold reserve in the form of U. S. gold certificates on deposit in the Gold Settlement Fund. Once a week each reserve bank telegraphs the amount which is owed by it to every other reserve bank. These totals are then offset, and the balances are adjusted by debits and credits in the fund. Settlements representing the exchange transactions between the different sections of the country are thus effected by a change in ownership of the gold, which is not in any physical way disturbed. Before the establishment of this national clearing house, it was necessary to transfer large amounts of gold and currency from one section of the country to the other as the trade balance varied in accordance with the seasons.

Rules and Regulations

In order that the transactions of the clearing house may be properly conducted, certain regulations are adopted. Rules govern the nature of items which may be passed through the exchanges, the manner in which they shall be indorsed, and the hour of clearing and settlement; fines are imposed for lateness or errors; and the kinds of money which may be used in paying debit balances are agreed upon. This necessity for regulation has led to further clearing-house development in which the banks act as an association for uniformity and the common good.

Country Check Department

Many clearing houses receive out-of-town checks from their members and make collection. In this way better terms and quicker returns can be secured than if each bank acted independently. Country checks handled by a clearing house are collected and not cleared. The clearing house in this case operates as the agent of all its members and deals with the out-of-town banks much as the member banks do in collecting checks through individual arrangement with their country correspondents.

In preparing transit checks for collection through the clearing house, each member bank assorts the checks the same as local items. That is, all checks drawn upon each out-of-town bank are listed together and the various bundles are then assorted in alphabetical order within each state. The checks are indorsed and then taken to the clearing house, together with a total of the entire lot.

The manager gives a receipt for the amount brought, upon which is noted the date it may be cleared. The checks from each member are listed together by the clearing-house clerks, and letters are sent directly to the country banks upon which the checks are drawn. Bookkeeping records are made corresponding to the accounts kept by the bank ledger bookkeepers in a bank.

The country banks remit direct to the clearing house, drawing upon their correspondents in the city in which the clearing house is located. These drafts are put through the exchanges by the clearing house on the day of receipt, and offset the receipt slips which have been given the member banks two days previous. The country clearing department has a seat in the city clearing house for this purpose. If the country banks should send in remittance drafts payable in other cities, the

manager of the clearing house charges such items to various member banks in turn, as if they were drafts drawn on that bank.

Clearing-House Examinations

Several of the larger clearing-house associations employ their own examiners, who work independently of state or federal officials. These local examiners not only make the usual audit and examination of the cash and books of the member banks, but they also make a careful investigation of the banks' loans and discounts from the viewpoint of the credit risk. In this way each member bank is assured that other banks in the city are being carefully managed and are in position to secure expert advice if it is needed. The records of the clearing-house examiner are confidential and cannot be secured by any of the banks. All detail reports are given to the officers and directors of the bank examined, and their attention is called to any assets which are of questionable value. The judgment of the clearing-house examiner is usually to be depended upon in this connection, since indirectly he represents the combined credit skill of the officers of all the banks which he investigates. It is a matter of record that no depositor has lost a dollar through the failure of a bank subject to clearing-house examinations. This system of examination was first adopted by the Chicago Clearing House in 1906.

It is expected that many of the activities of clearing houses in the United States will gradually give way in favor of the reserve banks, as these institutions develop in their supervisory capacity. The clearing function, however, for which all clearing houses are primarily established, is of sufficient importance in banking to insure the continued existence of bank clearing houses under any present or future banking system.

TEST QUESTIONS

1. What was the early history of the clearing house? Was the Suffolk system applied to bank checks?
2. Trace the relationship existing between the bank note prior to the National Banking Act and the modern check.
3. What is the clearing-house principle?
4. What is the big economy that will be effected by the adoption of the federal reserve clearing system?
5. What is the advantage a bank derives from being a member of the local clearing house?
6. Does the modern clearing-house association exercise a supervisory office over its members? In what manner?

CHAPTER XIV

ADVERTISING AND NEW BUSINESS

Banks are constantly seeking new business, although it is only within a comparatively recent period that it has been considered ethical among bankers to advertise for accounts. This development has been along natural and logical lines. All national banks and many state institutions are required by law to publish statements of their condition following the call of the Comptroller, if national banks, and a similar notice from the State Banking Department, if state banks. This obligatory publicity, consisting of a mere record of the balance sheet, has gradually been broadened in its scope until to-day it is not uncommon to find large banks with regularly organized advertising and new business departments in charge of an expert in that line. The Financial Advertisers' Association is a recent addition to the Associated Advertising Clubs of the World.

Banks advertise chiefly for depositors and investors, particularly the former, since the working funds of a bank consist in the main of the deposits of its customers. The so-called "side lines" of banking are also extensively advertised, especially those of the trust company, which performs many fiscal services not among the functions of the strictly commercial or savings institution. Safety deposit vaults, travelers' checks, and letters of credit are common features of bank service, while trust companies offer facilities in a fiduciary capacity which have been explained elsewhere. Educational

advertising is also found profitable, although definite results cannot be immediately traced to this class of publicity. Nevertheless, many banks are farsighted enough to appreciate the value of educating the general public along constructive lines, and in this way break down the prejudices that still persist against banks on the part of the ignorant or skeptical. In addition to these, there are many people who do not understand enough about banking to realize the advantages of a bank account and the incidental services that a well-equipped bank is prepared to offer. To them a bank is merely a building where surplus money may be deposited to be withdrawn when needed, plus the interest which in some mysterious way has accrued.

There are also advertising movements of broader significance worthy of note here. These are undertaken and furthered as a public service by the American Bankers' Association, by state bank associations and, to a certain extent, by the Federal Reserve Board. The prosperity of the banker depends primarily upon the wealth of the nation, the term being used in its economic sense. Hence the banker has come to regard it as part of his vocation to foster and encourage the production and conservation of wealth in every form. For example, the progressive bankers in the agricultural sections aid the farmers in developing scientific methods and up-to-date ideas. Thrift campaigns have been conducted generally in the effort to curb the wastefulness and extravagance, which are, unfortunately, national characteristics.

Bank Advertising

Banks that advertise do so in the conventional way, that is, through the newspapers, magazines, street cars, and other commonly accepted mediums. The day of "tombstone" advertising is on the wane. This epithet

is applied to the well-known custom of publishing advertisements about like this:

FIRST NATIONAL BANK

Capital and surplus	$ 500,000
Deposits	6,000,000
Resources	7,500,000

John Jones, President
Timothy Hay, Cashier

It requires no particular technical knowledge of the subject to appreciate that such notices are of little advertising value. Many banks, compelled to publish their figures as mentioned previously, seem unable to get away from the condensed statement-of-condition style of advertisement. When statements are published, it is possible to give bare figures something more than statistical interest. Even the weather forecaster has learned to make his daily list of temperature readings entertaining by adding thereto his personal opinion as to what to-morrow's winds may portend. The sagacious banker, too, is learning how to explain the otherwise meaningless figures of a statement so that the average reader can draw some intelligent conclusion.

In addition to the ordinary forms of advertisement, banks publish magazines of their own, issue pamphlets on financial or commercial topics of current interest, or send out monthly letters to their customers. This literature is for the most part produced by professional writers and advertising agencies, and much of it is of a high order. In the choice of mediums for their advertising, bankers often fall into error, although not always unavoidably. Banks seem to be the especial prey of the program publisher. It requires all the tact of which the banker is possessed to avoid useless and wasteful "advertising" in the hundred and one annual

programs that are urged upon him by every educational, social, and charitable organization of the community. These mediums are without value from the advertising viewpoint, yet it is hard to convince the solicitor, especially if he is a customer of the bank, that the money over which the banker has custody is not his own, but belongs to depositors and stockholders. Any banker will testify to the truth of the statement that if he should acquiesce in all the demands for money made upon him daily in one guise or another, he would go into the hands of a receiver very shortly.

Opening an Account

The first consideration in connection with the new depositor is that he must be properly identified or vouched for. The relation between him and his banker is one of mutual trust, and it would be very difficult, if not impossible, to do business if this feeling of confidence were constantly in danger of being disturbed. Banks must depend upon the common honesty and integrity of their depositors, as otherwise the entire system of handling the everyday transactions at the counter or on the ledgers would need to be revised. The savings banks employ methods differing from commercial banks, since it would be obviously impossible to insist upon the same precautions with respect to their depositors, who are often illiterate or from among the foreign element who cannot speak or write English.

One of the first steps to be taken is a proper classification of the new account, as for example:

Individual (personal).
Firm or copartnership.
Corporation.
Association or society.

Trustee or guardian.
Receiver.
Etc.

After the preliminary negotiations are concluded, the depositor places his signature either in a book or preferably upon a specimen signature card. Other information noted on the card consists of the source from which the account has been obtained or the introduction, the business of the depositor, and his address. If a firm, the specimen signature of each partner is taken; if a corporation, the signatures of its officers accompanied by a copy of resolutions of the directors or an extract from the by-laws authorizing certain of the officers or all of them to sign checks, drafts, notes, etc., or to indorse for the corporation. A check book and deposit tickets are then given the depositor as his needs may require. If the account gives promise of becoming a valuable one, the bank may go to the further expense of having a special check book printed.

A pass book is then prepared, which serves as a receipt for deposits taken by the bank. In the first part of the book will be found a copy of the general terms upon which the account is established; these limit the liability of the bank in acting as agent of the depositor and set forth other provisions. Sometimes a résumé of these conditions is printed upon the signature card, and the depositor signifies his acceptance of the terms when he affixes his signature to the card. The new depositor is introduced to the various officers and tellers with whom he will come into contact, and he is sent away with the feeling that his account is valuable and that the bank is anxious to serve him. As in other lines of business, a satisfied customer is one of the bank's best advertisements.

Competition for Accounts

The history of banking in the United States is one of keen competition. In the early days every new bank became the center about which was waged a bitter political struggle. Alexander Hamilton did his utmost to prevent the giving of a charter to the Bank of the Manhattan Company, a competitor of his Bank of New York, and he referred to the new institution as a "monster." It is interesting to note that these two excellent banks are still doing a competing business, even if they no longer hurl invectives at each other. Charters were difficult to secure, and subterfuge was sometimes resorted to. Joint stock companies were organized ostensibly for other purposes than banking and, after securing a charter, advantage would be taken of an adroitly worded clause to begin operations as a banking institution. Thus the Manhattan Company, just mentioned, was organized to supply the city of New York with water.

These conditions continued until the adoption of legislation known as the "Free Banking Act," which gave the right to any group of citizens to organize a bank under reasonable restrictions. The spirit of competition, as an inevitable result of an independent banking system, has prevailed, and in spite of clearing houses and other bankers' associations, there is probably no other business in which there is so keen a rivalry. The so-called "money trust" is about as complete a myth, so far as monopoly is concerned, as it is possible to imagine.

Competition between banks, however, is often ill-advised, since it sometimes leads to unwise, if not indeed unsound, practices. For example, the most common method used by banks to attract accounts is to offer high rates of interest on deposits. In order to earn a

living, the bank must necessarily make more money than it spends. If it is paying too high for deposits, either it must invest in loans which yield a rate of interest above the average, or it must speculate. Either policy is dangerous. Another common result of undue competition is the performance of too many gratuitous services by banks, which then seek to recoup themselves by excesses in the direction of exchange charges or exorbitant interest on loans, both of which are applied against those who are in no position to defend themselves. This is the darker side of the picture.

The better, as well as the most prevalent, type of competition for new business, is along the lines of service and courtesy. This in turn is based upon character and strength. Unless a bank possesses these two fundamentals, the best advertising is of little avail. The usual bank advertisement of the statement variety seeks to impress upon the reader the strength of the institution as indicated by the figures exhibited and the character of the organization as shown by the business or financial position of those who have its affairs in charge. Personality of management is the secret of success in most of our best banks.

Various kinds of individual service are provided by aggressive banks to attract business. Up-to-date equipment is probably the most effective inducement offered. In addition to a well-appointed banking room with modern vaults and fixtures, this applies to such things as check books and other stationery which the bank uses or gives to its customers. A special window is set aside for ladies; conveniences are installed about the lobbies to make the depositor feel at home and take pride in the bank with which he does business. If a new building is erected, the bank may hold a public reception before occupying its new quarters. In the country districts annual contests and exhibits are conducted in corn grow-

ing and similar agricultural lines. We have read of banks which keep a record of all births in the community and send a notice to the parents that a deposit account of one dollar, donated by the bank, has been opened for the baby.

Banking by Mail

Bank advertising is no longer limited to the immediate community in which the bank finds itself. The use of checks and other negotiable instruments as substitutes for money makes the personal contact between depositor and banker unnecessary. Checks can be sent through the mails with entire safety without special safeguards. The inducement offered the casual depositor to place an account in another city is a higher rate of interest than he can secure in his own neighborhood. This advantage is due to differences in state banking laws or to variations in the supply of liquid capital which make it possible for banks to outbid one another. In large cities which enjoy a favorable situation as railroad or trade centers, the banks are often in a position to collect great numbers of out-of-town checks at a low rate; hence such institutions advertise extensively to secure the accounts of corporations or mercantile houses generally who receive many out-of-town checks in payment for goods sold.

Banking by mail requires very little extra accounting, if any, as compared with the business done across the counter. The items are handled in precisely the same way, but instead of pass books being used, advice is sent to the out-of-town depositor upon receipt of each deposit. At the end of the month a statement is sent to him with his canceled checks. Should a question arise requiring information from the depositor, he is communicated with by telephone or telegraph. Not only is it

now possible for everyone to have a bank account no matter where he may be located, but even in populous cities an increasing number of people transact all their banking through the mails. The development of railroads and rural mail service and the extension and improvements in the telephone and telegraph, coupled with systematic advertising, have placed adequate banking facilities within easy reach of everyone.

TEST QUESTIONS

1. Along what lines should banking publicity be directed? Does bank advertising violate the ethics of the banking profession?
2. How should a banker handle the "program" advertising solicitor?
3. Is the mere publication of the bank's statement good publicity matter? What features should a bank emphasize in its publicity material?
4. In opening an account with a corporation, what cautions should be observed?
5. What steps were taken in the early history of banking to avoid legislative hostility and to procure corporate charters so as to enable the conducting of a banking business?
6. Why is it better for the public that competition among banks should not take the form of the payment of a higher rate of interest on the bank account?
7. Is it advisable to cultivate the banking by mail business?

CHAPTER XV

INTEREST ON BALANCES

In an earlier chapter we referred to the many services which banks render their customers gratuitously, especially in connection with the collection of items which are deposited for credit. Competition for accounts has resulted in a condition of mind on the part of the depositor such that he not only has come to regard this service as a right due him, free of charge, but such that he also demands that he share directly in whatever profit there may be in his account. That is to say, in addition to collecting funds for him, he insists that he be paid interest on the balance created by these collections.

Thus it happens that the two foremost practical questions that confront bankers to-day are (1) exchange charges and (2) the payment of interest to depositors. There are topics of broader concern, such as the movement of gold, the shifting of reserves, the open discount markets, the development of bank acceptances, and the like; but these are problems for the economist, the statesman, and the supreme court of banking to solve before the practical banker will be obliged to give them his time and attention as affecting the everyday services he renders his customers. This does not imply, however, that he is unacquainted with or unmindful of the importance of these underlying principles upon which his business is based. If he realizes that banking must be conducted on sound lines, he also knows better than

anyone else that no banking system can endure long unless the banks are prosperous. Thus the practical banker's immediate problem is to operate his institution successfully, that is, to keep his stockholders satisfied and at the same time render his customers adequate service.

The exchange question is discussed at length in other chapters and need not be referred to here. Like that question, however, the payment of interest on balances is as yet far from a satisfactory solution. Competition and a lack of progressive ideas have brought on a situation that promises to become acute, if not actually ruinous, to the banks that lack the courage or the ability to correct those practices which need adjustment to meet modern conditions.

It is a self-evident truth that money must be earned before profits can be distributed either as interest or as dividends. Furthermore, the returns upon loans and investments must exceed expense and dividend costs if the bank hopes to remain in a solvent condition. Yet we find banks offering rates of interest to attract deposits on terms that preclude any possibility of profit in the accounts secured by such means. Rates are high or low by comparison, not with the rates allowed by competing banks, but with the rates at which money can be safely loaned or invested, and with the earning power of the bank generally.

Rates Allowed by Banks

Money and credit are commodities affected by the laws of supply and demand very much as other goods are affected. When there is more liquid capital or banking credit seeking employment than there is a demand for, the price is low and vice versa. The risks involved as to the safety of the principal will also

govern the rate. Insurance upon a sawmill or a garage costs more than insurance upon a concrete warehouse or bank building of equal values. Hence we find that rates charged for the use of money vary as between different sections of the country on the same class of loans. In new communities the rates are high because there is a scarcity of capital on the one hand, and an uncertainty as to the future prospects of an undeveloped region on the other.

If due allowance is made for these basic influences, it is quite natural that the interest paid by banks should vary in different sections of the country. Generally speaking, rates are higher in the South and West than in the East. Active checking accounts receive on the average from 1½ to 2 per cent less than savings accounts. The reason for this is that commercial banks, in order to keep liquid, must invest a large part of their resources in loans and investments consisting of prime paper and "gilt-edged" securities that have a ready market and hence command the lowest loaning rate. Savings banks, on the other hand, deal in long-time investments, such as mortgage loans on real estate not subject to a quick turnover. The difference between the interest paid by the two classes of banks is due to the variation between the rates they earn upon investments and the costliness of the service they render their customers.

The rate paid upon active bank accounts varies from 2 to 4 per cent; upon inactive or savings accounts, from 3 to 5 per cent. These extremes, except in isolated districts controlled artificially, are, in the main, geographical in their significance. Cases are on record of banks paying as high as 7 per cent, whereas there are many institutions that pay no interest whatever. Such banks are in nearly every case prosperous and well managed and enjoy the confidence of a large clientele, thus prov-

ing that there is a good proportion of people who favor the "safety-first" idea in banking.

High Rates and Their Effect

Excessive interest rates and rates based upon no other consideration than the fixed purpose to outdo competitors, have led to numerous banking drawbacks, two of which may be mentioned. These are unethical practices among bankers and unwarranted ideas as to interest rights among depositors. Among the first of these we may class the too-prevalent habit of misleading customers as to the actual rate of interest paid. As a rule, the average depositor is unable to check the correctness of interest calculations, with the result that banks sometimes take advantage of this lack of technical knowledge by advertising one rate and actually paying another. For example, a bank located in a section where conditions would justify a rate of 2 per cent will offer to pay 3 per cent or even 4 per cent.

This apparently impossible generosity is accomplished by "doctoring" the balance. For instance, a deposit made the third of the month does not begin to draw interest until the first of the following month. Or again, if the balance varies from day to day, interest is allowed on the minimum rather than on the average balance. The result is that the depositor actually receives no more interest at "4 per cent" than he would have received at 2 per cent according to better methods. Let it be understood, however, that there is nothing unsound or unwarranted in making interest calculations according to the methods above described. The objectionable feature is that there is an element of deception involved, and competition on these lines is both unfair and unethical.

The second objection to excessive interest rates is

that depositors, especially those who through ignorance or malice are distrustful of banks, gain the idea that they are being exploited by the bank which will pay no interest or else allow a more conservative rate than is offered elsewhere. They do not know that in time of peril or stringency the weaker must rely upon the stronger banks, else all would go down. The writer has in mind a typical case that admirably illustrates this point. A customer who had lost a large sum in a bank that had failed, opened a new account with a much stronger and more conservative institution. After a month or two he went to his bank and complained that he did not appear to be receiving as much interest as he formerly was paid by the bank that had gone under. The reply that his banker made can readily be guessed.

Competition between banks that is based largely if not solely on the rate of interest allowed depositors is bound to cause friction between neighboring institutions. Bitter feeling is engendered, with the inevitable result of retaliation until both banks, or all, if there be several, are paying more for their business than they can afford. Forced to earn a high return upon their investments, the banks must of necessity charge stiff discount rates at all times, regardless of normal money conditions. Thus an artificial situation is gradually developed which spreads from a common center until the banks in nearby cities and towns are affected similarly.

Many banks recoup themselves by charging arbitrary and too often exorbitant rates of exchange in order to make both ends meet. A careful investigation made at the time the federal reserve par clearance system was being inaugurated disclosed the fact that high rates of interest were paid upon balances in nearly every section where the strongest objection to a reduction of exchange

charges was met with. In other words, with the worst face put on the situation, it appeared that many banks were "buying" deposits with excessive interest and then paying the bill by charging abnormal exchange rates on checks drawn against the balances thus secured. The effect of such a condition is that the merchants and the banks of the larger cities, without their being aware of it, are taxed to pay interest to the purchasers of goods who live in the smaller communities. To this charge the retort is made that the merchant includes the exchange costs in his prices, so that ultimately the consumer pays anyway. While something might be said in favor of this operation as evening up wealth and privileges between rural and metropolitan communities, it certainly cannot be recommended as a sound economic proposition, but only as vicious in its tendencies.

Methods of Computing Interest

In order to meet the objections of country banks against paying their checks at par, the Federal Reserve Bank of New York sent out a circular letter in the summer of 1916, the purport of which was that a dollar saved is quite as important as a dollar earned. Member banks were advised to make an analysis of the accounts of their customers to determine to what extent depositors were receiving services and interest not justified by the nature of their accounts. Banks that enjoyed the uninterrupted privilege of remitting for checks drawn upon themselves, less ⅛ or ¼ of 1 per cent, had not been accustomed to give much further attention to an account than to see that it was not actually overdrawn, but when it became necessary to redeem checks at their face value, a readjustment was required to make each account pay for itself. The circular letter

referred to above called the attention of member banks to the necessity of analyzing accounts to determine what services could be rendered for each dollar of balance carried and the rate of interest that might be profitably allowed.

We have noted the habit which many depositors have been permitted to acquire as to entries in a pass book. That is, so long as there is a book or ledger balance to their credit, nothing is done to discourage them from drawing immediately against deposits of checks which may be outstanding in process of collection for several days. Since a bank cannot loan funds which are non-existent in that they have not yet been collected, there is an actual loss to the bank if drafts against transit checks are permitted before cash returns for such checks are in hand.

If, in addition, interest is allowed on the full ledger balance with no deduction made for uncollected deposits, the bank loses still further. Country banks are more consistent offenders against their own interests than city banks in this respect. Many clearing-house associations fix rules providing for deductions based upon average time outstanding. This principle is identical with that of the federal reserve banks which defer credit (for reserve purposes) on items deposited by their members but payable in other districts.

It is virtually impossible to gain any profit upon a small balance on account of the cost of stationery, clerk hire, etc., incidental thereto. Hence a limit is set as to the minimum balance upon which a bank will pay interest. For that matter, many banks refuse to accept very small accounts unless a monthly fee is paid. The limit fixed upon minimum interest-bearing balances varies largely according to the nature of the account. A very active account will require a relatively large "free" balance, that is, a proportion upon which no

interest is allowed. Inactive or "reserve" balances usually command higher rates.

Interest is allowed on thousands and hundreds of dollars. Only savings banks make a general practice of calculating interest on smaller fractional parts. That is, a balance of $34 would be paid interest on $30 only in most savings banks, and a balance of $1,965 would draw interest on $1,900 in a commercial bank.

Interest periods also vary to a considerable extent. In New York City a deposit must remain six months in a savings bank before interest is allowed. The interest is paid for the entire period, but in order to discourage the use of a savings bank for temporary deposits this rule is adopted. Commercial banks credit interest monthly, quarterly, or semiannually. If the credit is made monthly, the interest period usually extends from the twenty-sixth of one month to the twenty-fifth of the next. This plan is adopted in order to prevent the clerks and bookkeepers from becoming overwhelmed with work at the end of the calendar month, a time when all accounts are most active.

Good practice prescribes the following method for the calculation of the true interest-bearing balance. From the ledger or book balance is deducted the amount of out-of-town checks deposited for which returns have not been received. A separate record is made of such items so that the bookkeeper knows the total amount of outstanding checks each day. The total amount of checks paid against the account that day is next deducted, and the remainder is the balance upon which interest is figured, since it is this net sum only that is available for loaning purposes. Many banks add to the interest-bearing balance the checks deposited payable by themselves, since these amounts have been deducted from the interest-bearing balances of the drawers as of the same day.

Earning Power of Banks

If there should be any change in present methods of paying interest on bank balances in those sections where high rates now prevail, it will come about largely as a result of necessity due to a lower, if more stable, rate of earnings. There are several factors which are apparently operating to bring this about:

1. The open discount market established by the federal reserve system.
2. The unrestricted development of the activities of note brokers.
3. The increase in the efficiency of credit investigation.
4. The general movement toward the abolishment of exchange charges.
5. The gradual disappearance of a "frontier" and unsettled areas in the country.
6. The economic change in the financial position of the United States due to the great war.

The effect of these various factors in the practical operation of banks may be briefly explained. The discount policy, as well as the rates of all federal reserve banks, is subject to the supervision of a central body of control. Since the twelve banks may be required to rediscount for one another, it would be impractical, if not impossible, that there should be any great variation between the official rate of the Boston bank, let us say, and the Dallas bank. The result is a reduction of rediscount rates to an approximate common level, which means that borrowers in districts where money is scarce, through the federal reserve system, have ready access to funds that are more abundant elsewhere and hence cheaper.

The note broker finds a fertile field in sections where bank discount rates are high. He goes to borrowers of first-grade credit in such communities and sells their notes, for a commission, to banks in towns and cities where rates are lower. While bankers often have just cause to complain that this practice sometimes results in borrowers' securing rates to which their grade of credit does not entitle them, on the other hand, it provides a check upon discount rates which might otherwise be artificially maintained at high levels.

As credit methods become standardized and perfected, bank losses due to bad loans decrease. Since such losses must be paid out of earnings, it follows that that part of discount which represents insurance will be forced down by competition. It may here be stated that there are many mistaken ideas in the public mind as to the division of earnings between the stockholder and the depositor. An editorial writer in a well-known New York newspaper took it upon himself, not long since, to prove to his readers that all banks might properly be criticized in this respect. He used as an illustration a certain excellent institution which pays 20 per cent to its stockholders and 2 per cent to its depositors. No account was taken of the element of service and its value to the depositor. The principal error into which this untrained observer fell was in overlooking that the dividend represents the return upon both capital and surplus.

A bank lays aside a certain part of its earnings to protect itself and its depositors against losses. If the bank is well conducted and ably managed, these anticipated losses may not materialize and the surplus grows; this adds materially both to the strength and to the earning capacity of the bank. As this fund increases, the stock of the bank advances in market value, so that the stockholder who receives 20 per cent on the par

value of his stock may actually be paid less than 5 per cent on the amount he has invested.

The reduction of exchange charges has a direct effect upon the earning power of those banks which have profited unduly thereby, but the income which the public may lose through a lower deposit interest rate is offset by the elimination of excessive exchange charges. On account of our independent banking system with its thousands of separate banking units, this evening-up process will naturally be slow, which is also true of the other factors which tend toward more stable levels of income and cost. But the result will be more scientific and economically correct banking practice.

The settlement and development of unclaimed areas in the United States has a twofold effect upon bank earnings in such sections. Until very recently, legal interest rates as applied to bank loans have been the exception rather than the rule in certain districts. That is to say, the scarcity of local capital and the risk involved in its employment made it necessary for borrowers to pay what would appear on the surface to be exorbitant rates if one were to leave out of the equation the laws of supply and demand and the element of insurance against total loss. But as development proceeds, not only is the risk incidental to untried enterprises eliminated, but new capital is produced, and the supply of available bank funds thus increased.

It is too early to predict what the precise effect of the altered status of the United States as a world financial power may have upon discount rates, but it is reasonable to expect that domestic rates will be influenced more than ever by the money markets of the world, and toward a lower level. There are, of course, certain influences at work in the opposite direction, as, for example, the unparalleled destruction of the world's supply of fixed capital by the war in Europe. It is

likely that periods of "tight" money may be met with from time to time as in the past, but unless some powerful and permanently neutralizing force should be set in operation, it seems reasonable that interest rates on money should tend lower rather than higher. If this be so, then banks now paying high rates must either reduce the interest paid to their depositors or else charge fees for services now rendered gratuitously. Perhaps they will do both.

What has been said in the foregoing paragraphs must not be construed to imply that banks, as a whole, are threatened with a reduction of earning power. New fields have been opened by the enactment of modern banking laws which permits banks to develop business along new lines, as, for example, the acceptance of time drafts. Also the trend is toward a lower cash reserve and a centralized bank reserve, which would place our American institutions on equal terms with European competitors.

European Experience

For that matter, the most logical solution of the interest problem is suggested by European banking experience. That is, interest will be paid as interest is earned—at rates subject to variation. In other words, when discount rates are low, interest on balances will be reduced or discontinued temporarily. As the demand for loans stiffens and the surplus reserves begin to fall, the discount or loaning rate increases. At such times not only can banks afford to pay a higher rate of interest on deposits, but it is to their advantage to do so, since loanable funds are thus attracted to the market where they can be best employed.

Prior to the enactment of the Federal Reserve Act, the nearest approach we had to an official or open

money market rate that might serve to govern interest rates, was the call-money rate in New York City. This, however, was subject to sudden and violent fluctuations and hence could in no sense serve as a basis to determine interest rates on deposits. But with the inauguration of the official discount rates as published by the federal reserve banks, it is reasonable to expect scientific reforms in the method of fixing rates of interest on deposit accounts.

TEST QUESTIONS

1. What is the true theory in regard to the interest rate that should be paid on a customer's balance? Does such a theory conform to European experience?
2. What is meant by "doctoring" the balance of an account for interest purposes? Is it an ethical practice?
3. What is the connection between high interest rates and high exchange rates? Are they in any way related?
4. What is the difference between a "free" balance and an "inactive" or "reserve" balance?
5. What are the six factors that are tending to bring about a uniformity of the interest rate to be paid on bank balances?
6. What is the big factor that is tending to make the American discount rate uniform?
7. What would be the immediate effect of the standardization of credit methods?

CHAPTER XVI

THE SIGNIFICANCE OF THE BANK CHECK

Definition of a Check

The Negotiable Instruments Act defines a check (in English banking practice spelled "cheque") as "a bill of exchange drawn on a bank, payable on demand." This definition is not final unless we add something by way of explanation of the bill of exchange, which in legal phraseology is described as "an unconditional order *(in this case, the check)* in writing addressed by one person *(the drawer)*, to another *(the bank)*, signed by the person giving it *(the drawer)* requiring the person to whom it is addressed *(the bank)*, to pay on demand *(if a check)*, a sum certain in money to order *(of the payee)* or to bearer." The italics are our own. The practical banker has shortened this definition to simple terms: "A check is an order for the payment of money."

Commonly accepted banking and legal views to the contrary notwithstanding, a check in actual practice is seldom used as an order for the payment of money. It has rather become an order for the transfer of banking credit used as a substitute for money. To comprehend the economic importance of this fact, it is necessary only to remember the purpose of money, and then the use to which the bank check is put is more readily understood. Money is the medium of exchange. It is withdrawn from bank vaults and tills not that it may be burned as fuel, consumed as food, or worn as raiment,

but that it may be used to purchase these materials and also the spiritual necessities of life. Modern commercial civilization has discovered that bank credit can be made to serve the same purpose at less risk and at a much lower cost.

The use of credit as money or, more specifically, the employment of bank checks or currency, without encountering the danger of credit inflation on the one hand or Gresham's Law on the other, depends upon two considerations: (1) The initial credit extension must be based on tangible assets and (2) the bank check which is drawn upon that credit must be payable in cash on demand. When it is considered that more than 90 per cent of all exchange transactions are settled for by check—bank credit money—and less than 10 per cent by the use of currency, it will be appreciated why it is that banking and check collection are inseparably a part of any nation's monetary system.

It is a curious, but altogether comprehensible, fact that the average practical banker fails to grasp the true significance of the development of the bank check. The use of checks gives rise to more than 75 per cent of bank accounting and certainly 50 per cent of the everyday worries and troubles a banker is put to. From the banker's point of view the check fails to pay its way, so to speak, and in his daily routine he is concerned with the practical, rather than the theoretical, view of the question.

If we should refer to all that has been written and said upon the check collection provisions of the Federal Reserve Act, it would be noticed that much thought has been devoted to the subject from the practical banking standpoint, although little has been said of the influence of checks upon banking and currency systems. Yet any discussion of check collection methods and systems is beside the question if it does not take into

account the evolution in the development of the bank check and the true significance of that development.

Early American Note Issue

It will not be necessary in a review of the evolution of the bank check and its ultimate effect upon money and currency issues to trace the development of the use of instruments of credit as debt-paying media back to their remote origin in the days of Greece or Babylonia. That the bank check, as we now know it, may be an evolution of the cuneiform tablet is an interesting and illuminating thought, but its effect upon currency issues is of recent and modern nature, comparatively speaking, and we can eliminate from this discussion all data prior to the days of early American banking.

The principal functions of banking, as stated previously, are three: deposit, discount, and issue; yet the history of banking has been a history of note issue. That is to say, banking systems have been successful or not in proportion to the soundness of the principles underlying note issue. It might be added that what are recognized as sound banking principles all bear relation to note issue, although at first glance this fact is not apparent. For example, bank supervision that is intelligent and thorough is a prime essential of a successful system of note issue. This can, to a reasonable extent, be provided by law. Careful banking judgment as to the extension of credit or the liquidity of assets, on the other hand, is a factor which cannot be so fixed and regulated, although it is approximated in provisions that are to be found in certain banks of issue limiting the paper discounted to given maturities—usually within ninety days.

One cause for the weakness that existed in some of the early state bank laws lay in the fact that while

bankers, business men, and legislators generally recognized that note issue was the pivotal function of banking, very few of them seemed to be aware that this function was sensitive to every phase of the business of deposit and discount. The fallacy which existed in the popular mind that wealth was to be created at will merely by the issue of bank notes was reflected in the ease with which a bank, once it had surmounted the political difficulty of securing a charter, could and did issue such notes.

Every political error that could be written upon the statutes, every economic crime that could be committed in the name of banking, found expression in the laws of the states between 1800 and 1860. During that period, whether at ebb or flood, there was a tide of state bank currency, some of it good, some of it indifferent, but most of it bad. It has been well said that the newly independent states, bent upon overthrowing European forms of government among them, were equally determined to test out for themselves the soundness of tried economic doctrines. In the case of bank notes, the issues were good, bad, or indifferent, depending upon the soundness of the general banking principles under which they were issued. Those notes were nearly worthless that were issued by banks over which there was little supervision and practically no system of examination, and hence there were disastrous bank failures; or where the amount of specie reserve was inadequate, and hence the issues were inflated; or where prompt redemption was not compulsory, and hence there was both lack of confidence and inflation; and finally, where the notes could be redeemed at par only at the counter of the issuing bank, and hence they would circulate only at a large discount. It is significant to note the methods that were pursued to correct these evils, remedies as

unscientific at times as the principles of note issue were unsound.

A bank bears a threefold relation to the public; or rather, the public is divided into three groups of interests. The smallest group is composed of the stockholders, who act on their own initiative and responsibility in accepting their relation to the bank and who have also a voice in its management and control. The second group is made up of the depositors, who, although not exercising any measure of control, are free to choose where they will intrust their funds. The largest group is the general public, who hold the notes of the bank and have neither direct control in the management of the bank—their debtor, nor practically any choice in accepting the obligation that establishes their relation to it.

The chief error in early legislation was that protection for the last group was the end striven for without proper consideration of all the other factors entering into the equation. The logical result of these efforts at reform was the safety fund system, adopted by New York and several other states to secure the noteholders of defunct banks. It did not seem to occur to these pioneers in banking legislation that greater stress should be laid on measures that would insure bank solvency. They were not of the period that believes fireproof construction is safer, as well as more economical, than any form of insurance.

The Change from Bank Notes to Checks

It will not do to classify all state bank issues as deficient, ineffectual, or unsound. The Bank of Louisiana, the Bank of Indiana, and what became known as the "Suffolk system of New England" were notable

exceptions, and there were others. However, the National Bank Act, descending upon both the just and the unjust, taxed state bank notes out of existence. It cured nearly all the evils of currency issue, but added one that we labored under for half a century—inelasticity.

It is an economic truth that commerce and trade will find a medium of exchange whether or not one is provided by the government under which the exchange of commodities is effected. When the National Bank Act put an end to the note issues of state banks, the country was left without a medium that would respond readily to the demands of trade. During the reconstruction period following the Civil War, the "greenback" shared the burden with the new national bank note, but both were instruments of political rather than of economic law. Something else was needed to perform the function of the discontinued state bank notes. Thus began the extensive use of the bank check, not new in itself, but new in the sense that it took on an importance that has steadily increased until the present day, which finds us doing more than 90 per cent of our business with checks and drafts.

The change from the viewpoint of the banks was largely one of bookkeeping. Note liabilities became deposit liabilities instead. Clearing houses developed, and reserve balances provided originally for the redemption of the new national bank notes were used for the purpose of collecting checks. Unfortunately, however, many country banks took advantage of the same opportunities that existed with respect to their notes in the early days. Banks established in remote sections, far from the business centers, threw every obstacle in the way of attempts to make them redeem checks upon themselves at par, just as they or their predecessors fought against any plan that would compel them to pay

their notes in specie at par. The abuse of the exchange charge gradually demoralized the proper use of the check until conditions became as intolerable to the business public as was the case with the discredited state bank notes.

History furnishes us with an interesting example of the fact that the check can perform the functions of a bank note. The connecting link between the two, if one were needed to show the truth of the statement, is to be found in the notes of the famous bank of George Smith in Wisconsin. Banking and note issue were practically synonymous terms, in the days of early American banking, and it was impossible to secure a bank charter in Wisconsin after the disastrous days of 1837. Clauses prohibiting banking were inserted in every charter granted to other associations. George Smith organized an insurance company, whose charter contained the usual prohibitory clause against banking, that is, note issue, but allowed the company to receive deposits. This privilege, thus granted, indicates that the deposit function of banking was considered of minor importance. Smith, however, issued certificates of deposit in small denominations, similar to bank notes in design and payable to bearer. "George Smith's money" circulated freely, and since his "bank" was conducted along sound lines, he not only prospered, but was able to defeat all efforts to close his institution.

The Problem of Collection and Redemption

In only one section of the country did the bankers of the early days make a determined and concerted effort to correct the abuse incident to independent note issues. That was in New England in 1818, and the plan adopted was the Suffolk system. That the motive was not one of disinterested regard for the general good is nothing

against the soundness of the idea, which was briefly that notes should be redeemed at a business center as well as at the counter of the issuing bank. Experience both in this country and abroad has shown this doctrine to be correct in theory and in practice. It was applied to the national bank notes at a very early day and made their general circulation possible.

It is not surprising in view of the success met with under the Suffolk system that New England again demonstrated that the modern bank notes and bank checks must also be provided with a place of redemption and channel of collection at par. The country check collection department in the Boston Clearing House, established in 1899, solved for New England the problem of the bank check and the abuses that had grown up incident to its collection.

The panic of 1907, which was the turning point in the modern financial history of the United States, demonstrated very clearly both the importance of bank deposit currency and the need for better methods of check collection. Indeed, it is not unlikely that if every reserve and collection center had had at that time a so-called "country clearing house," the panic would not have assumed the proportions it did. After the disjointed, independent system of check collection had absolutely broken down, except in New England and in one or two other centers, the demand for currency was increased far beyond its original proportions. Bank notes, which were unavailable, were needed not only to care for what might be termed a "normal" panic demand, but also to supply the place of checks which suddenly became comparatively useless as a means of payment.

It is not surprising, therefore, that the Federal Reserve Act in providing for a more elastic note issue has included in the same section the first legislation

ever adopted covering the collection of the bank check. These provisions in Section 16 fairly parallel the old Suffolk plan of note presentation and redemption. Under the Suffolk system, the country banks were allowed the privilege of building up their balances in Boston with deposits of the notes of other banks. Against the balances their own notes were charged. Under the Federal Reserve Act member banks deposit checks on other members, and against the credits thus created the federal reserve banks charge checks to the members upon whom the checks are drawn.

The act would seem to contemplate that the federal reserve notes will in time supplant the present national bank currency, gold certificates, treasury notes, and greenbacks. All these issues reflect a steady demand, and they are absorbed by normal conditions of trade. It would seem, however, that the elastic feature so necessary to a currency system will be supplied by bank checks. To those who see a danger in a currency thus subject to inflation, the answer is: There is no more risk of an inflation of deposit liabilities than there is of note liabilities. The inflation arises in the original issue of credit upon which both deposits and note issues may be based. Against both a specie reserve is required.

Legal and Practical Obstacles

The full and complete use of checks as a means of payment or credit currency is still somewhat hampered by inadequate legal protection. For example, the status of the bank indorsement stamp needs to be cleared up so that there will be no question but that a collecting bank is agent and has not "taken title" to a check deposited for credit. A check drawn against an existing balance having reached either its local clearing house or

the federal reserve bank, should not be subject to return or to a reversal of credit if the bank upon which the item is drawn should fail.

It should be a misdemeanor either to draw against insufficient balances or to kite checks. Banks are prohibited either by law or by rulings of the Comptroller from indulging in unsound practices of like nature, and why should individuals be given privileges for which there is no legitimate excuse? Unauthorized overdrafts and kiting are not proper ways in which to borrow money. Not only should bankers coöperate in urging the adoption of better laws covering checks, but they should also set about reforming some of their own methods. It is foolish to assert that these are impossible delusions and that "competition" will prevent such regulations from being enforced. The fact is that they have been in force for many years in hundreds of the best banks in the country, large and small, and in not a few clearing houses.

Some Superiorities of the Check over the Note

Other things being equal, as to the safeguards thrown around the banking system as a whole, the bank check is superior in many ways to the ordinary bank note. The difference between the two is one of business habit rather than of principle. Under the note liability method, the notes are issued wholesale and pass from hand to hand in the payment of debts until the business that called them forth has been completed and they are retired from circulation. Under the deposit-and-check method, each debt is canceled by a single instrument that is made to fit the particular amount, and the instrument is immediately redeemed. Title does not pass by delivery, but usually by indorsement. Hence, the check for many purposes is as superior to the bank note as

the clearing-house currency certificate is superior to actual gold for the payment of clearing-house balances.

There are other advantages that may be mentioned. People are encouraged to open bank accounts and make use of checks who would never carry such accounts otherwise. Thrift is thus encouraged and millions of dollars are turned into productive channels instead of being allowed to lie idle. We have educated the people to carry check books rather than wallets. While the amount of profit resulting to the banks is not entirely tangible, it can be appreciated even by the most shallow observer of financial conditions. It is hard to see how the business public could very well get along without the check, and bankers of to-day would not think of doing otherwise than encouraging the use of checks to the fullest possible extent.

The Question of Cost

Unfortunately, the ideal situation with respect to the use of checks as debt-paying media seems difficult of attainment. It will need to be developed gradually as both banks and public become educated into the scientific use of credit instruments as money. The first problem to be solved is that of the expense involved—who shall pay it? We are so accustomed to the sovereign right of the government to coin money and issue proper substitutes for metal currency that we give ourselves no concern as to the costs involved. So also we take a check book (usually printed free by the bank), draw a check, and mail it to pay a bill in a distant city. It does not occur to the average individual that although this method of making payment is much cheaper than shipping the actual cash, somehow the credit must be transferred through bookkeeping entries from one point to another and someone must absorb the cost.

The creditor who receives the check is naturally pleased. The money represents a debt that has been owing or a profit upon a sale. He deposits the check with his own bank with a subconscious feeling that his bank is as glad to have the check as he. Yet just the reverse is true. The deposit represents cost, not profit, to the bank which must make collection, unless a fee is exacted for the service.

It is the effort to shift or avoid this cost which has caused so much difficulty in the collection of out-of-town or transit checks. The question arises—upon whom shall the cost of check issue and collection be placed?

The drawer?
The payee?
The bank upon which drawn?
The bank making the collection?

If the matter is viewed strictly from the theoretical side, the consensus of sound opinion is that the drawer of the check, having issued it to serve his needs, should pay all costs involved. In practice, however, it is difficult to sustain this entirely correct theory in the face of keen competition between and among thirty thousand independent banks.

The line of least resistance, and one more easy and more certain of results, is to tax the last indorser, usually a bank which presents the item for payment through the mail. An exchange charge is exacted, and thus the drawer and his bank are exempt. The cost, however, may be passed back by the collecting bank to the payee who deposited the check. He, in turn, may seek to avoid it by depositing his items in another bank, which, to secure business, will make collections free of charge. The result has been that an intolerable condition has arisen out of the abuses of banking privileges by the public and the exacting of tribute by a few banks that

have sought to profit unduly through exchange charges.

Those who are in sympathy with efforts to correct check collection conditions base their position on the conviction that checks are handled too many times in the effort to avoid charges and are subject to too much consequent circuitous routing in the process of collection; that fictitious balances are thus created, causing an unavoidable pyramiding of reserves with the result that the whole independent system of check collection has broken down every time serious pressure has been put upon it.

Those who take the opposite view and oppose every effort to abolish exchange charges as such, either openly or by indirection take the position that their own immediate profits are seriously threatened, or else attempt merely to prove that it is impractical to force banks to pay checks at par. The student must not be misled by the fact that many sound bankers of excellent judgment are found in opposition to the proposition that banks should remit at par for checks drawn upon themselves. If we are to regard a bank check simply as an order for the payment of *money* at a *distant point,* there is considerable weight to the contention that the bank cannot be expected to make such shipment without a proper charge.

But as we have pointed out, a check represents an order for the transfer of credit, which may be accomplished entirely by book entries. When A draws his check in favor of B, he has, in effect, directed his bank to transfer a part of his credit to the credit of B. B, in turn, deposits A's check, not that he may draw cash, but that he may make a similar payment to C. The banks involved in these transactions carry only as much actual cash in their own vaults as experience has demonstrated represents the average proportion of deposits that will seek conversion into currency.

And so it is with transfers of credit between different cities and sections of the country. How much cheaper, safer, and more convenient it is to transfer credit through the check and let the money upon which that credit is based rest undisturbed. Exchange transactions between different sections of the nation ebb and flow and in the end must even themselves up. That is the theory upon which the twelve federal reserve banks settle their differences through the Gold Settlement Fund at Washington, and as the correctness of this principle of settlement becomes understood and appreciated, it may be expected that the bank check will in time become a perfected instrument in its employment as a substitute for currency.

TEST QUESTIONS

1. What is a check?
2. Trace the development of the modern check, and discuss the relationship existing between the modern check and the bank note that was issued prior to the National Banking Act.
3. What was the chief error of the early legislative protective measures that were designed to safeguard the note issues of the private banks?
4. What was the basis for the popularity of George Smith's money?
5. What did the panic of 1907 clearly demonstrate?
6. What are some of the legal remedies that should be enacted to render the check a freer instrument of credit?
7. What are some of the superiorities of the check over the bank note?
8. On whom should fall the cost of the check issue and collection?

CHAPTER XVII

THE FOREIGN EXCHANGE DEPARTMENT

Banking transactions, and commercial relations between individuals involving banking, are based upon the clearing principle, which has been referred to and explained in the preceding chapters. That part or phase of banking in which the clearing principle is put in operation for the clearance and settlement of trade differences between nations is called "foreign exchange banking," or, briefly, "foreign exchange." The fundamental principles of exchange and banking are nowhere more clearly illustrated than in this branch of the business, nor—for reasons that will be explained later—are the practical details of operation more complicated and involved than in this highly technical and specialized form of banking.

With almost the entire civilized world at war (1917) and the normal channels and facilities of trade and intercourse virtually paralyzed, foreign exchange banking practice is in a completely disarranged condition, and is likely to remain so even after peace is established, owing to the new commercial alliances which will undoubtedly arise. Readjustments on an unparalleled scale in connection with war loans, indemnities, and similar financing are also to be expected.

These conditions would scarcely require comment in a chapter on banking practice were it not for the fact that foreign exchange bankers having, through necessity, introduced so many changes in their methods of

doing business, will no doubt permanently and by common consent adhere to new ways and practices which began as makeshifts. This situation must be borne in mind in reading what follows. Remember, however, that the theory remains the same in any event; men must live and trade with each other no matter under what terms. Standards of living and the mechanism of exchange may vary, but the fundamental theories involved are as immutable as the laws of nature.

Purpose of Foreign Exchange

The purpose of foreign exchange banking is to facilitate international trade, using the word "trade" in its literal, primary sense, that is, the exchange of commodities. Without international exchange the various races and peoples of the earth could scarcely have developed beyond the period of roving savages and marauding tribes bent upon conquest, except in more or less isolated areas upon the globe where every natural resource necessary to modern civilized social organization is to be found. Patriotism, military prestige, racial and religious preferences, imperial ambition, and similar abstract terms abound in historical literature, but the fundamental cause and purpose of war is almost invariably economic. If the plague of war is ever to be banished from the earth by international treaty or concert of nations, such agreements to be permanent and binding must be based upon terms of trade and exchange, as well as upon terms of language, race, and armaments.

Foreign trade, like domestic exchange, consists principally of the buying and selling of commodities. Although, for the sake of convenience, we speak of this international commerce as between nations, in practice the trade is between corporations, firms, and indi-

viduals engaged in import and export and not between governments. Thus we say America sells wheat to England or cotton to Germany. In reality, using typical transactions by way of illustration, Smith, Jones & Company, of Baltimore, sell a cargo of wheat to Ross & Brother, Liverpool; or Hamilton & Company, of Galveston, Texas, sell five hundred bales of cotton to the Gebrüder Schmidt, of Hamburg. At the same time, English and German firms are selling manufactured goods to Americans. The commerce between us and England, let us say, is similar to any one of a hundred other exchanges between all nations of the globe. Even the semicivilized quarters of the earth contribute their share of the world's international commerce.

Thus debit and credit relationships arise between the tradesmen of nations as between individuals in the same town. In the chapter on "Clearing Houses" we have noted how the function of banking is employed locally to make settlement without the use of money except to settle the differences known as "balances." In the same way foreign exchange banking performs precisely this service in accomplishing the settlement of trade balances between nations. Since no nation traffics exclusively with one neighbor, but since each is free to do business with any other, it follows that in normal times of peace a sort of world's clearing house is inevitably developed toward which the bulk of foreign exchange transactions gravitate as do funds to the financial center of every individual nation.

This world center is London, and it is likely to remain so unless the whole character of the business habits of mankind change or unless there should be some pronounced upheaval in the needs of various nations and their ability to supply those needs. Just as the building of the Erie Canal reversed the relation of Philadelphia and New York as financial centers, so the open-

ing of the Panama Canal and similar events of world-wide influence may ultimately shift the position of an international clearing house. The point that should be clear is that the facilities offered commerce and trade, and not the clamor of patriotic fervor or the stern behest of military despotism, fix the status of cities and nations in their commercial importance.

The transactions that give rise to debit and credit relations between nations requiring the operation of foreign exchange settlements are as follows:

The sale of commodities.
The sale of stocks, bonds, and other securities.
The payment of interest on securities owned abroad.
The expenses of travelers in foreign lands.
The payment of freight bills arising from cargoes carried in foreign-owned vessels.
The negotiation of finance bills.
The remittances made to relatives in foreign lands.

The great bulk of foreign exchange transactions arise out of the export or the import of commodities, and since in its practical aspects as affecting the banker, the purchase and sale of foreign exchange is not altered by the use to which it is put by the customer of the bank, we may confine ourselves to a discussion of the subject as it is concerned with exports and imports. To make this more clear to the reader by a concrete illustration, let us suppose that a customer of a New York bank purchases a check for five pounds sterling drawn on a London bank. In naming a rate to his customer, the banker does not need to know or care particularly if his client wishes to pay a bill for goods bought in England, buy some British stock, pay a freight bill, or use the draft to settle a hotel bill during a contemplated stay in London.

Instruments Used

The purpose of foreign exchange banking is more than the mere settlement of trade balances. This is the primary object, but like other forms of banking it seeks to economize the use of actual money by employing negotiable instruments. This is doubly necessary in foreign transactions since the currency of nations is not uniform, and even if the coin of each nation were legal tender in every other, there would remain the hazard of long sea voyages between continents. Hence it may be stated that money is never used directly in international transactions in the purchase and sale of goods. The bill of exchange and the check are the instruments generally employed.

CLEAN BILLS

Bills of exchange unaccompanied by documents are called "clean" bills. They are common to certain classes of transactions, such as tobacco shipments, which purely as a matter of custom are financed by clean bills. Other clean bills are those arising from the purchase of bunker coal and supplies by steamship captains calling in foreign ports who draw upon their owners in making payment.

DOCUMENTAL BILLS

The larger part of the bills used, however, are accompanied by documents consisting of bills of lading, insurance documents, etc. The documents vary according to the requirements of the country to which the goods are sent and in which the bills are payable and sometimes according to the nature of the goods. Drugs, for example, require a certificate of analysis.

Bills of exchange are also classified as to tenor, such

as sight bills and three, thirty, sixty, and ninety-day bills. Time bills are designated by the general term "long" bills as distinguished from sight, demand, and three-day sight drafts. All foreign bills of exchange as well as the accompanying papers are drawn in duplicate and sometimes, though rarely, in triplicate. This duplication is merely precautionary against the risk of loss, which would occasion delay and confusion. Bills of exchange are in simple terms drafts which the shipper draws against the purchaser, his agent, or bank in an amount and according to terms previously agreed upon.

CHEQUES

Checks or "cheques" (so spelled because the greater part are drawn in terms of the English pound sterling) are issued in duplicate, seldom if ever in triplicate. They are generally drawn by banks upon other banks, individual account drafts being used only by the very largest exporters, who carry their own bank accounts in the countries where they do considerable business.

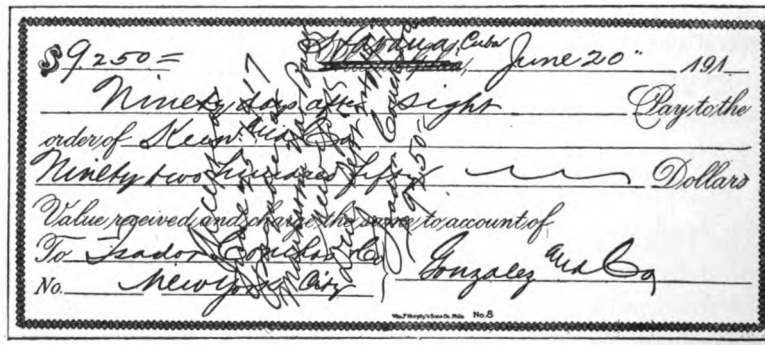


FIG. 90.—Acceptance

Common type of acceptance shown in full negotiable form as purchased by investing bank.
Indorsed on back:

Keen & Co.
Twelfth National Bank
Philadelphia
Keen & Co.

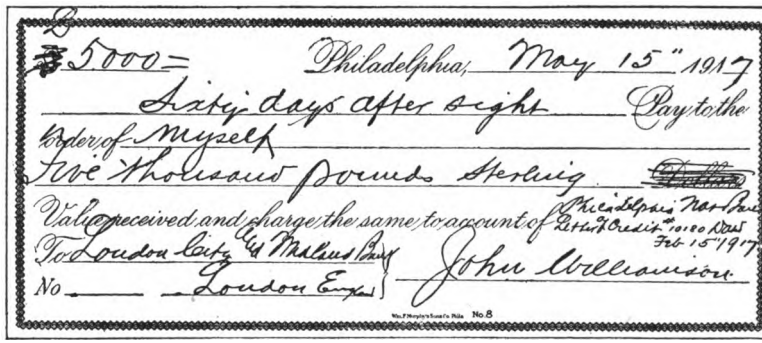

£5000= Philadelphia, May 15" 1917
Sixty days after sight Pay to the
Order of Myself
Five Thousand Pounds Sterling
Value received and charge the same to account of
To London City & Midland Bank
London Eng.
No.
John Williamson
No. 8

FIG. 91.—Foreign Acceptance

Common form of draft usually purchased by domestic banks for investment; resold for delivery abroad *unaccepted* when acceptance of drawee is procured and the document completed.
Indorsed on back:
John Williamson

LETTER OF CREDIT

Another kind of instrument, nonnegotiable but very extensively used in foreign exchange transactions, is the letter of credit. (See Figure 92.) The commercial letter of credit is in the nature of a written guaranty secured by an importer from his bank, which thus agrees to accept drafts up to a fixed amount. The bank granting the letter of credit will write to a foreign bank in the country or city where the purchase is to be made, advising or confirming the obligation which it has assumed. The operation is not unlike that of a certified check with which a bank depositor fortifies his credit when he wishes to make a payment in a community where his financial standing is not well known.

TRAVELER'S LETTER OF CREDIT

There is also the circular or traveler's letter of credit upon which the issuing bank enters the amount of the credit extended. The purchaser presents this instrument at any one of a given list of the bank's foreign cor-

Philadelphia, _____ 191__

No.

You are hereby authorized to value at _____ on _____

for account of M. _____

for any sum or sums not exceeding in all _____

_____

for _____ cash _____ of _____

to be shipped to _____

The Bills of Lading to be filled up to _____

_____

It is a further condition of this credit that you place with _____ immediately on completion of each shipment a copy of the Invoice and all the copies of the Bill of Lading therefor except one copy which you will please send by the vessel carrying the goods under cover to M. _____ in order to ensure their being at the port of destination simultaneously with the arrival of the property to enable our friends to obtain possession thereof.

The drafts are to be drawn and dated at the time of shipment.

And The Philadelphia National Bank, Philadelphia hereby agree with the drawers, endorsers and bona fide holders of Bills drawn in compliance with the terms of this Credit that the same shall be duly honored on presentation at _____

_____

Certified Invoice to be sent to M. _____

Draft under this Credit to contain the clause drawn under Credit No. _____

dated Philadelphia, _____ 191__

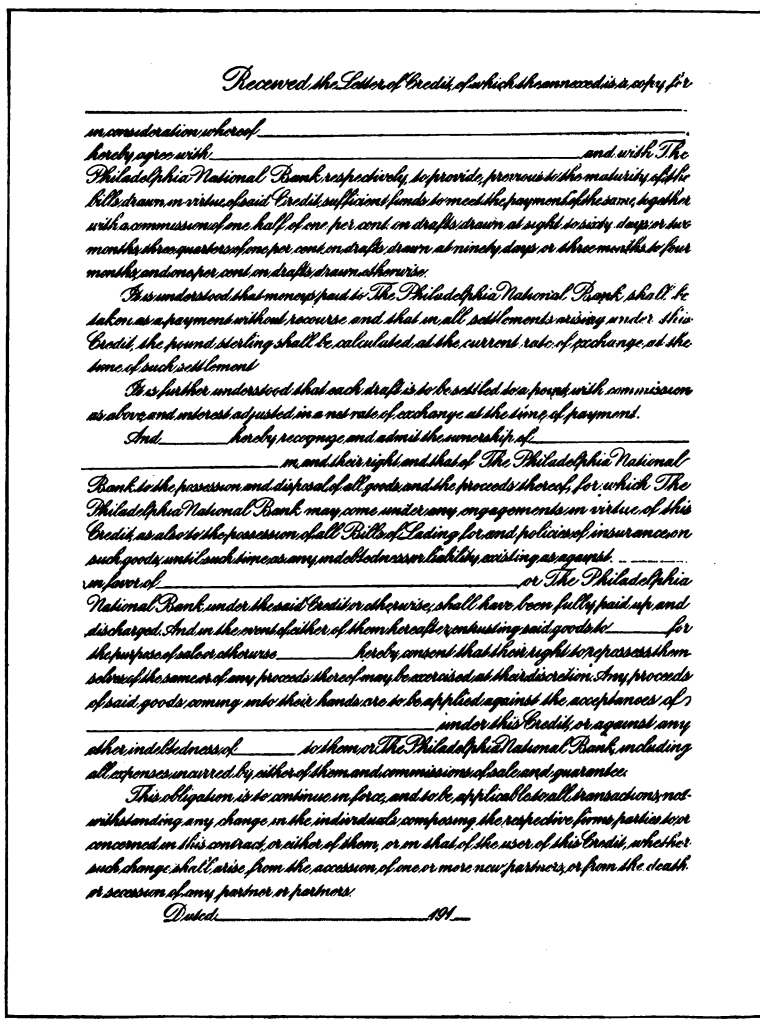
For _____

The Marine Insurance to be effected _____

This Credit becomes void if not used on or before the _____

The Philadelphia National Bank.

FIG. 92.—Letter of Credit (Agreement of Bank)



Received the Letter of Credit, of which the annexed is a copy, for

in consideration whereof

hereby agree with *and with The Philadelphia National Bank, respectively, to provide, previous to the maturity of the bills drawn in virtue of said Credit, sufficient funds to meet the payment of the same, together with a commission of one half of one per cent on drafts drawn at sight or sixty days, or two months, three quarters of one per cent on drafts drawn at ninety days, or three months, to four months, and one per cent on drafts drawn at longer.*

It is understood that moneys paid to The Philadelphia National Bank, shall be taken as a payment without recourse, and that in all settlements arising under this Credit, the pound sterling shall be calculated at the current rate of exchange at the time of such settlement.

It is further understood that each draft is to be settled for at par, with commission as above, and interest adjusted in a net rate of exchange at the time of payment.

And *hereby recognize and admit the ownership of*

in and their right and that of The Philadelphia National Bank to the possession and disposal of all goods and the proceeds thereof, for which The Philadelphia National Bank may come under any engagements in virtue of this Credit, as also to the possession of all Bills of Lading, for and policies of insurance on such goods, until such time as any and all indebtedness or liability existing as aforesaid

in favor of *or The Philadelphia National Bank under the said Credit or otherwise, shall have been fully paid up and discharged. And in the event of either of them hereafter embracing said goods to* *for the purpose of sale or otherwise* *hereby consent that their right to repossess themselves of the same or of any proceeds thereof may be exercised at their discretion. Any proceeds of said goods coming into their hands are to be applied against the acceptances of*

under this Credit, or against any other indebtedness of *to them or The Philadelphia National Bank, including all expenses incurred by either of them and commissions of sale and guarantee.*

This obligation is to continue in force, and to be applicable to all transactions, notwithstanding any change in the individuals composing the respective firms parties hereto concerned in this contract, or either of them, or in that of the user of this Credit, whether such change shall arise from the accession of one or more new partners, or from the death or secession of any partner or partners.

Dated *191*

FIG. 92.—Continued (Agreement of Customer)

respondents, which then enters the amount paid against the letter in a space provided. The traveler is in the position of a depositor who is privileged to carry about with him the ledger record of his account with his bank.

In the foregoing paragraphs describing the various instruments of foreign exchange, it will be noted that the promissory note is conspicuously absent. In short, a unique feature of foreign exchange banking as compared with the domestic business of discount and deposit, is its freedom from risk as to the loss of principal, except in case of absolute fraud or bank failure. There are few "bad debts" in foreign exchange. The banking involved is based directly on the commodity that is being moved, to which the bank purchasing the bills of exchange practically takes title until the instrument is accepted by the drawee. Losses, of course, are likely to be sustained, but as a rule these are due to unforeseen fluctuations in exchange rates and errors in calculations rather than to failure to meet maturing obligations.

When importations that have been purchased under a commercial letter of credit reach their destination, they cannot be secured from the carrier without the surrender of the bill of lading which is attached to the draft drawn upon the bank that has issued the letter of credit. Obviously the bank cannot use the goods itself, but must permit them to be delivered over to the consignee by surrendering the bill of lading. This, however, would remove from the bank's possession the collateral security upon which it has based its acceptance of the draft.

This contingency is met by the use of the trust receipt (Figure 93), under the terms of which the importer agrees that the proceeds of the sale of the commodity imported are to be applied to the payment of the draft. He acknowledges the title and ownership of the goods

F. D. 33

TRUST RECEIPT

Received from THE PHILADELPHIA NATIONAL BANK the following goods and merchandise, their property, specified in the Bill of Lading per _____

dated _____ marked and numbered as follows:

and in consideration thereof, we HEREBY AGREE TO HOLD SAID GOODS IN TRUST FOR THEM, and as their property, with liberty to sell the same for their account or to manufacture and remanufacture the same without cost or expense to them and we also agree to keep said goods, and the manufactured product and proceeds thereof, whether in the form of money or bills receivable, separate and capable of identification as their property, and in event of sale to collect the proceeds and immediately deliver such proceeds to THE PHILADELPHIA NATIONAL BANK, in whatever form collected, to be applied by them against the acceptances of _____

on my/our account, under the terms of Letter of Credit No. _____ issued for my/our account, and for the payment of any other indebtedness of mine/ours either due or to become due to THE PHILADELPHIA NATIONAL BANK. It is understood, however, that if such proceeds be in notes or bills receivable they shall not be so applied until paid, but with liberty meanwhile to THE PHILADELPHIA NATIONAL BANK to sell or discount and so apply net proceeds of such notes or bills receivable. We agree to mark our ledger and the office copy of our invoice relating to said goods "PROPERTY OF THE PHILADELPHIA NATIONAL BANK."

THE PHILADELPHIA NATIONAL BANK may at any time cancel this trust and take possession of said goods or the manufactured product or of the proceeds of such of the same as may have then been sold, wherever the said goods or proceeds may then be found, and in the event of any suspension, proceedings in bankruptcy, or failure, or assignment for benefit of creditors on my/our part, or of the non-fulfillment of any obligation, or of the non-payment at maturity of any acceptance made by me/us under said credit, or under any other credit issued by THE PHILADELPHIA NATIONAL BANK on my/our account or of any indebtedness on my/our part to them, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon (with or without notice) at their option mature and become due and payable. The said goods and the manufactured product thereof while in my/our hands shall be fully insured against loss by fire, and the insurance money received for any loss shall be subject to the trust herein contained in the same manner as the goods themselves.

Dated _____

(Signed) _____

£ _____

(Details of documents on attached form)

FIG. 93.—Trust Receipt

to be invested in the bank, and he agrees to identify or earmark the materials so that in case of need the bank can claim its property to cancel the debt. He is further responsible for the insurance against fire or other loss.

Instruments of foreign exchange are bought and sold and not accepted on deposit in the usual sense. Bills of exchange may be left for collection to be credited when paid, in which case the owner assumes the risk of exchange fluctuation as well as the loss of interest. The usual procedure, however, is that the shipper of goods, the exporter, draws upon the importer or the bank of the importer and then sells the draft for cash to a bank dealing in foreign exchange, thus securing cash payment as soon as he has delivered the goods to the carrier. His liability remains, however, until the draft is finally paid.

Agents

The principals in international transactions, when making payment for imports and exports, seldom, if ever, deal directly with each other. We may except, of course, the intimate trade relations existing between neighboring countries, as for example the United States and Canada, where business customs and monetary units are practically identical. Buyer and seller agree upon prices and terms of sale at the outset, but beyond this point all matters of payment are handled through intermediaries, dealers in foreign exchange.

These consist of banks, bankers, and brokers. Many international banking houses maintain branches in all the principal cities of the world, but until the enactment of the Federal Reserve Act, American bankers had been handicapped by being unable to establish branches in foreign countries. All large banks in every important city in the commercial world have long since enjoyed

the advantage of agencies in this country, but the use of this privilege has until recently been impracticable to any except private bankers and state banks in the United States.

The foreign exchange department of a bank may be compared in its relation to the bank, to the trust department of a trust company. That is, it is to a certain extent separate and apart from the bank, although employing the bank's funds in its operations. It has its own books and records, its own force of clerks under the supervision of a manager, who may or may not be an officer of the bank, and it does business with its own customers. The records of its transactions are, however, carried on the general ledger and the statement of the bank, and thus connect the accounting of the foreign exchange department with the other departments in administration and operation.

If the daily purchase and sale of foreign exchange could be brought to an exact equality or offset by a bank, its transactions in this class of business would be extremely simple and easy of operation. This, of course, never happens, and in order to prevent the tying up of an excessive amount of capital in foreign bills at one time and the occasioning of an embarrassing shortage of exchange at another, it becomes necessary for the bank, through its foreign exchange manager, to secure a ready outlet for his surplus funds or a source of supply in case of need.

This condition has produced the foreign exchange broker, whose function it is to bring buyer and seller together. He transacts the greater part of his business by telephone, ascertaining early in the day where the supply of various kinds of exchange is located and at what rates it is held. He is then able to quote rates to others seeking to purchase. For his services he receives a commission.

The Manager of a Foreign Exchange Department

The manager of a foreign exchange department is a highly trained specialist. His sphere with relation to the bank is somewhat similar to that of the credit man in that his judgment and decisions are relied upon as those of an expert in his line. He is much more independent than the credit man, however, since he must be able to quote rates and make instant decisions without first referring the matter to those higher in authority. He must be a close observer of money conditions both at home and abroad and be able to diagnose these conditions accurately. He must be fully conversant with business customs and have a working, practical knowledge of foreign currency systems, negotiable instruments, and other documents used in foreign exchange transactions. He must, withal, be a shrewd trader and able to meet on equal terms the dealers in exchange in every country.

Foreign exchange is a commodity dealt in strictly on its merits, subject to the keenest kind of unrestricted competition and bound by no statute law save the laws of negotiable instruments to the extent that such laws are international. There is no other phase of banking where less artificial restriction and regulation can be relied upon to yield profits.

If the bank is large, or engages very extensively in foreign exchange transactions, one or more officers of the institution give their exclusive time and supervision to the department. This is both prudent and practical since it might otherwise be impossible for the foreign exchange manager to keep his transactions in line with the domestic needs and policy of his institution. Just as the board of directors or the officers of the bank govern the discount policy and reserve position of the bank according to seasonal needs and the commercial

fluctuations of the day, so the foreign exchange manager is constantly engaged in maintaining what he terms his "position" with respect to his present or future contracts in exchange transactions. Thus it follows that the domestic and foreign operations of the bank, each involving the use of large capital outlay, must be kept in harmony.

The clerks assigned to the department are engaged in accounting duties similar to those performed by their fellows in other parts of the bank, but in addition there are one or more employees who can speak or at least read and understand English, French, and German. A knowledge of other languages may be essential, depending upon the geographical location of the bank and the nationality of those with whom it does business.

Foreign Exchange Practice

Foreign exchange transactions, so far as practical purposes are concerned, recognize but one kind of money, gold. The average reader, who is accustomed to think in terms of coins and bank notes and to regard the gold coin rather than the metal as representing money, must be reminded that coinage is merely a device used by all nations to certify as to the weight and fineness of the gold content. The word "dollar" used as a measure of value means 23.22 grains of pure gold. So small a quantity of gold is relatively costly to mint into a coin and inconvenient to handle. It has therefore long since ceased to be used, and although we still have the $2.50 gold piece in circulation, the smallest gold coin in any considerable use is the $5.00 piece. This coin corresponds in size to the English sovereign, or pound, which contains 113.001605 grains of pure gold. In financial parlance, English money is designated by the term "sterling." The sterling equivalent of our

gold dollar is 4s. 1 32/100d. In practice, however, the equation is based on the sovereign as a unit, which is equal in value to $4.86656 gold. This is called the "mint parity of exchange" and is written without the dollar mark in sterling exchange transactions.

The French unit of value is the franc. In franc exchange quotations the method used in quoting sterling exchange is reversed: that is, the French unit for the dollar is used rather than the dollar unit for the franc. Thus the France-United States parity of exchange is 5.18134, or 5.18⅛, signifying the number of francs equivalent to our gold dollar.

To add to this confusion in detail, the German exchange quotations are based on the United States equivalent of four marks, the mark being the German unit, equal in value to $.238309 gold. Hence the parity according to the usual commercial method used in exchange transactions with Germany is 95¼ cents, equaling four marks.

These uses of different bases are even more confusing when the foreign exchange quotations are listed either above or below par. When sterling exchange is quoted below par, it is below $4.86656, and vice versa. On the other hand, when francs are below par, the figures representing the quotation are actually higher than 5.18⅛ because the dollar is measured in a depreciated currency.

These mathematical complications, it will be observed, arise from the fact that scarcely any two countries wrap up their parcels of gold, so to speak, in the same size packages. The principles involved in the conversion of gold, the international money, from the unit of one country into terms of the unit of another are the same, however the mathematical calculations may differ. It will serve no useful purpose in a book of this kind, and in fact may only tend to confuse the reader, should we

attempt to explain the details of conversion by the use of problems in fractions and equations. We will, therefore, confine ourselves to an explanation of the process by referring merely to the elements which are taken into consideration by the banker in making his quotations for the purchase and sale of foreign exchange.

As we have seen, the primary purpose of negotiable instruments is to avoid the use of money, i. e., with respect to foreign exchange, gold. However, the quantity of the substitutes for money is based upon the volume of trade moving one way or the other and is hence regulated by the laws of supply and demand. Thus it happens that a scarcity of sterling bills of exchange will so increase the rate as to make it cheaper to export gold than to buy bills. When this scarcity is present, we have what is known as the "shipping point."

There are four elements of cost involved in the shipment of gold:

1. Packing and cartage from the bank to the steamer.
2. Freight charges.
3. Insurance.
4. Loss of interest on the money while in transit.

Gold for shipment is packed in oaken kegs about the size of the ordinary nail keg, each keg accommodating about $40,000. The packing and cartage cost is about $2.25 per keg. In normal times the freight rate averages 5/32 per cent of the value of the gold and the insurance 1/20 of 1 per cent less 10 per cent. If these various costs are taken into consideration, the sterling exchange rate (parity 4.8665+) must rise (due to scarcity) to approximately 4.89 before it becomes cheaper to ship gold than buy exchange.

Another factor which causes gold movements is the discount rate. Money, like labor, will seek the market

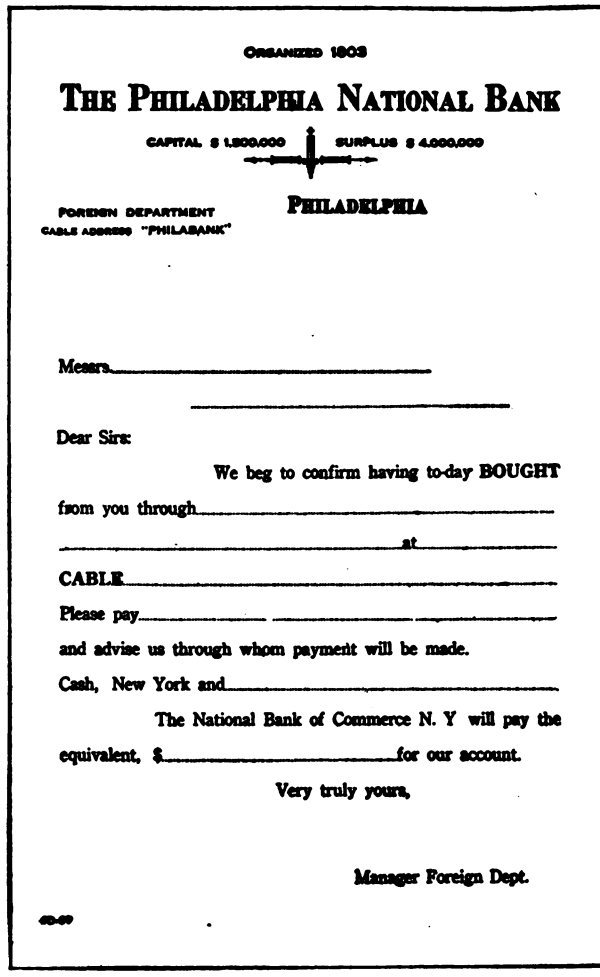
where it can be best employed. If, for example, the bank discount rate in New York is considerably lower than the Bank of England rate, money (gold) will be exported to England (or imported to England, depending on the point of view), the increased earning power offsetting the cost of shipment.

All known rules governing gold shipments are virtually suspended for the present, due to causes previously mentioned. It is problematical whether such shipments will ever be resumed on the same bases as prevailed prior to the war. If all nations could be put upon an inviolably permanent peace basis, practically all large movements of the precious metal save, perhaps, the original distribution of the newly mined gold could be dispensed with. The world at large gains nothing by shipping the foundation of its credit system back and forth. To use a domestic example, we have the Federal Reserve Gold Settlement Fund, which has made useless and obsolete the constant ebb and flow of gold from one section of the country to another. Texas cannot war upon New York nor Ohio upon California; hence the gold of all can be centered in one place and the credit based upon it transferred by draft or wire at will.

Buying and Selling Exchange

In order to discourage speculation in exchange and to assure to the exporter or the importer a fair degree of certainty as to the cost of financing his foreign transactions, contracts are entered into between producers, buyers, and dealers in foreign exchange. For example, if a bank has sold its drafts against London balances, it may contract to buy cables to cover to be delivered on the day the drafts reach London for payment.

Cables are transfers of funds by ocean telegraph and



ORGANIZED 1803

THE PHILADELPHIA NATIONAL BANK

CAPITAL $ 1,500,000 SURPLUS $ 4,000,000

FOREIGN DEPARTMENT
CABLE ADDRESS "PHILABANK"

PHILADELPHIA

Messrs._____

_____

Dear Sirs:

We beg to confirm having to-day BOUGHT

from you through_____

_____ at _____

CABLE_____

Please pay_____

and advise us through whom payment will be made.

Cash, New York and_____

The National Bank of Commerce N. Y will pay the

equivalent, $_____ for our account.

Very truly yours,

Manager Foreign Dept.

FIG. 94.—Foreign Exchange Purchase Contract

eliminate the element of time incidental to payment by bank drafts (cheques) which must be sent by mail. In order to provide for the authenticity of a cable order to pay money, banks use a code word or number as a test or signature. This test changes with each message, and since the formula for arriving at the test number

is kept under lock and key and subject only to official supervision, it has the same effect as an officer's name on a bank draft. A typical test word formula would be: "Add together the day of the month upon which the message is sent; the numbers corresponding to the day of the week (accompanying table), and the month (table); and the numbers for the amount as to thousands, hundreds, and units (table). Then add your private number, which is ———." In order to safeguard this last number doubly, it is usually fixed after the test formula has been mailed, or it may be cabled separately; although all the above-mentioned formula numbers are permanent or are changed at rare intervals, it will be observed that the test number will vary with each cable, and it is harder to solve without the formula than it would be to forge a signature.

In buying sight or three-day sight bills, the foreign exchange manager takes into consideration the rate at which he knows he can sell his own cheque and then bids a slightly lower rate so as to secure a margin of profit. Naturally his own draft, which he may sell, cannot reach London, let us say, before the draft which he has bought is paid, if a sight draft; hence the element of interest is not a factor. In the case of a three-day sight draft, which according to English law bears three days' grace, he must either take into consideration the interest cost for six days or know at what rate he can sell his own cheque six days later.

In buying time bills, payable thirty, sixty, or ninety days after sight, the foreign exchange manager must first decide upon which of two bases he will name his price. If domestic loaning rates for money are low and his bank has a surplus of funds, he must know at what rate he can sell the bank's cheque about thirty-three, sixty-three, or ninety-three days later, and he

then quotes a price which will yield a profit as an investment.

For instance, if the domestic rate for money is 4½ per cent and the foreign exchange manager learns he can make a contract to deliver the bank's cheque on August 4 at 4.75⅜, he may make a bid of 4.73⅛ on July 1 for a thirty-day sterling bill, which, if accepted, will net a profit of 4⅝ per cent as interest on the investment in the bill, thus exceeding the local rate for money by ⅛ per cent.

Example:

On a 30 d/s bill for £1,000@4.73⅛ the bank pays	$4,731.25
Stamps @ 1/20%	2.36
	$4,733.61
Price of cheque sold Aug. 4 @ 4.75⅜	$4,753.75
Profit	$20.14

or approximately interest at 4⅝% for 33 days.

If, on the other hand, time bills can be discounted abroad at a lower rate than money is worth in the domestic markets, the manager fixes his buying price on the assumption that he will sell his cheque at once against the bill which he remits to his London correspondent with instructions to discount, crediting his account with the proceeds. In other words, if money is loaning in New York at 5 per cent and discounts are quoted in London at 3 per cent, the buying price is based on the fact that money used to purchase a time bill can better be employed at 5 per cent in New York. than to permit the bill to mature rather than pay 3 per The process of conversion is: purchase of the bill; immediate sale of the cheque against it, thus recovering the outlay of principal; and discount of the bill by the London correspondent, the proceeds being applied

to the credit of the American bank in time to meet the cheque which was drawn and sold against the bill at the time of purchase.

In the cases just mentioned we have used as examples London prime bank bills, i. e., bills of exchange commanding the best open-market discount rate, but the principles are the same for bills drawn in any other foreign currency. The only variations are minor ones, such as different stamp charges in other countries and extra charges for bills on inland cities outside the money centers corresponding to our domestic exchange charges on out-of-town checks.

Purchasing quotations may also be affected by any one or all of the following considerations:

1. By the financial standing or credit of the drawees, who may be large stock banks, private bankers, or commercial houses.
2. By the credit standing of the drawer, who, as we have noted, is not released until the draft is finally paid.
3. By the amount of competitive bidding for the same bill.
4. By the amount of any given "name" already purchased. The conservative manager endeavors to keep his lines of credit within reasonable limits, and when almost "full" of one name, he will bid lower on successive offerings, thus forcing the bills elsewhere or else deriving a greater return as his risk increases.
5. By the size of the transaction or the volume of business controlled by the seller. An exporter of cotton, grain, or steel, necessarily a man or concern of some means and presumably well informed by experience as to exchange values, would naturally command a better rate than the occasional

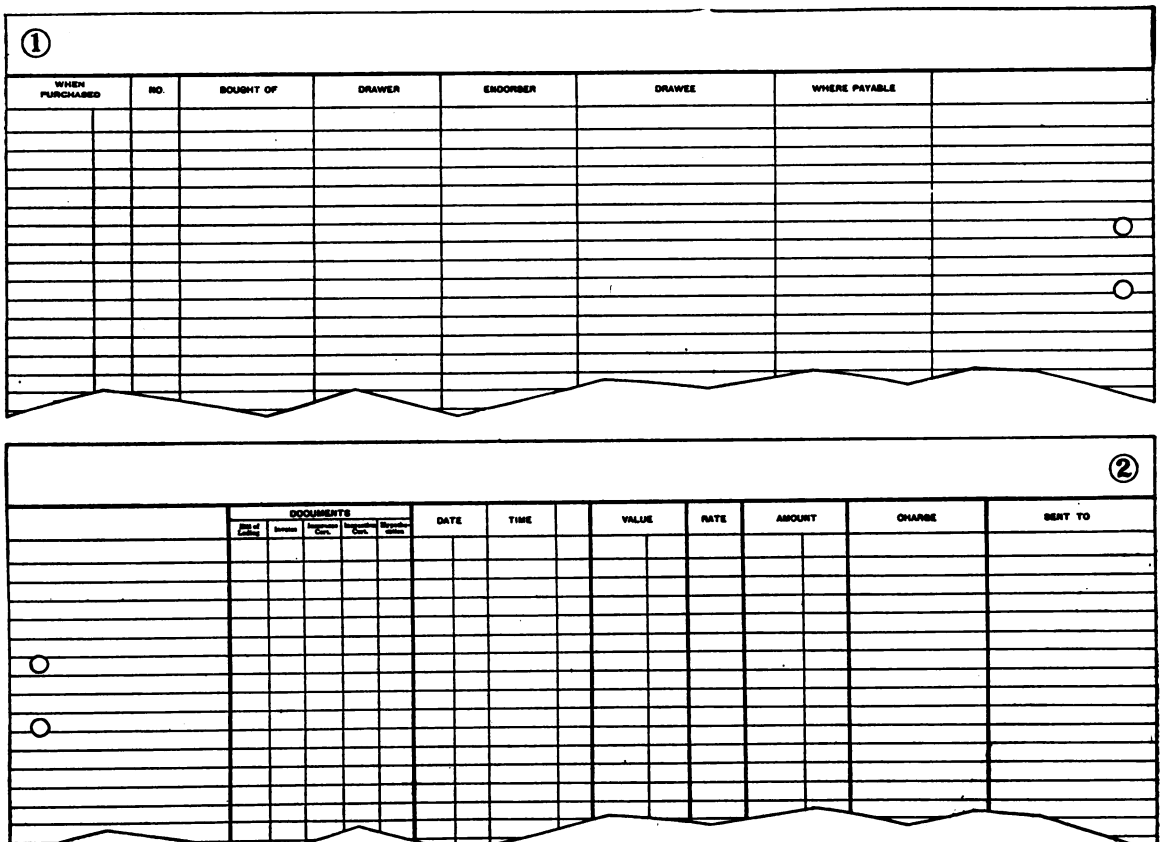


FIG. 95.—Foreign Exchange Bills Purchased Register
(Left-hand (1) and Right-hand (2) pages)

small exporter of other commodities shipped in lots of less value and perhaps not so staple.

Accounting

The principal books of record of the foreign exchange department correspond to the books used for like purposes in other departments and consist of journals, registers, and ledgers.

The Sales Book is a journal in which is entered a complete record of exchange sold: date of sale, purchaser, drawer, payee, number, amount, rate, and United States equivalent.

The Bills Purchased Register (Figure 95) corresponds in general to the Domestic Collection Register. A full description of each bill purchased by the bank is provided for in columns extending across two pages. The columns are headed: drawer, drawee, indorser, complete list of accompanying documents, description of goods covered by the bill of lading, name of steamer in which shipped, the amount (foreign currency), rate, and dollar equivalent.

The ledger differs from the ordinary ledger in that the amount of the item in foreign currency as well as the dollar equivalent is posted. Provision is also made for listing opposite each amount entered the discount (should the item be discounted before maturity) or the cost of collection in order to show the net amount realized.

The Liability Ledger shows the amount of outstanding bills purchased from each drawer and also the amount drawn on each drawee.

The Commercial Letter of Credit and Traveler's Letter of Credit Record shows the amount of each credit issued with subsequent entries of amounts as the credits are utilized.

In addition to the above-mentioned books and records, the manager of the department keeps a running account of all sales and purchases in what is sometimes termed the "Trading Book." This record is essential as a guide in maintaining the position of the department and in filling contracts for future transactions in exchange.

Under normal conditions bills of exchange are not retained by purchasing banks for maturity but are sent forward to be discounted, the proceeds to be advised and charged against the foreign bank to which sent. During war times, however, it sometimes is more profitable to permit the bills to mature, since the rate of discount would otherwise seriously impair, if not entirely wipe out, the profit. Bills that are not rediscounted are entered as an asset in the general statement of the bank under the heading "Bills Purchased." In the condensed statement of condition, Bills Purchased Account is included in the item "Loans and Discounts."

Settlements with foreign correspondents are generally made quarterly. These settlements correspond to the monthly statements rendered by city banks to their country correspondents. Owing to the distance and the time required for correspondence to be received and answered, the reconcilement and audit of foreign accounts is more difficult than that which pertains to domestic accounts, where letters are received overnight and items are "in the air" for only a day or two. The principles are precisely the same in both cases, however. About the time of the settlement it is customary for banks engaged in international transactions to advise credits, debits, and similar operations as belonging to the "old account" or "new account" so as to avoid confusion in reconcilement as much as possible. In reconciling the inactive or partly active accounts there is, of course, no necessity for observing the distinction between the "old" account and the "new" account.

Acceptances

The privilege of accepting time drafts drawn upon them is a right conferred upon banks by the Federal Reserve Act, and it may be described as the development of the commercial letter of credit. To repeat what has been previously said, the letter of credit is simply a bank guaranty that drafts drawn in accordance with terms set forth in the letter of the credit will be paid when due, this guaranty securing any bona fide holder. The Federal Reserve Act places the limitation on the amount a bank may accept at a sum equal to the capital and the surplus, subject to the approval of the Federal Reserve Board, which must be first secured.

The principle of the acceptance is the lending of the bank's credit rather than the lending of money, and in practice this method of financing is safer for the bank and hence cheaper to the customer. It will be observed that when a time draft is presented to the bank, it accepts but does not pay the item. There is no outlay of money. A letter of credit is a document printed upon two sides of the sheet, the bank's agreement to accept on the front, and the customer's agreement to put the bank in funds on or previous to the day of maturity, on the back. Since there is no outlay of money by the bank, a commission rather than interest is charged.

Without the letter of credit or acceptance a deal involving the purchase by Smith & Jones, of Boston, of a quantity of wool from Garcia & Co., of Buenos Aires, requires that either Smith & Jones make a remittance before the wool is shipped from South America or that Garcia & Co. ship without first receiving payment. In either case the unexpected financial embarrassment of one would affect the other. Under the letter of credit or acceptance system, the seller having in his possession the guaranty of a bank that drafts drawn against the

described export will be paid, can draw and sell his drafts with the certainty that the transaction is closed and that no action of Smith & Jones, voluntary or involuntary, can throw the wool back on his hands or disturb the amount he has received from his sale.

The federal reserve banks will buy in the open market acceptances of member banks, and this too at a very low rate of discount. Consequently, many banks employ idle funds in the purchase of other banks' acceptances, knowing that in doing so they are making a very liquid investment, and in case of need one which the federal reserve banks will take off their hands at a lower rate than that at which the best of commercial paper can be rediscounted.

The reason for this discrimination in favor of the bank acceptances as compared with commercial paper is that there is no guaranty that the proceeds of the latter are to be used for what might be termed "legitimate business needs." The borrower may buy an automobile or a yacht instead of putting the money borrowed into his business. The acceptances, on the other hand, can be given only against accompanying documents, such as bills of lading, warehouse receipts, etc., covering actually existing goods of a nature known to be incidental or vital to the business of the customer.

When a letter of credit is issued, the issuing bank by its pledge of payment of drafts drawn thereunder incurs a liability which is set up on the general ledger as "Letters of Credit" and offset by a corresponding asset "Customers' Liability under Letters of Credit." When drafts are presented and accepted, a new liability is set up, "Acceptances"; this reduces the Letter of Credit Account by the amount of the acceptances but does not affect the customer's liability, which, of course, remains as before until he actually pays the bank as the goods are sold.

Under this system of bookkeeping, generally but not invariably used, the Letter of Credit Account represents unused but authorized credit. Acceptances represent that portion of credit which has been used, both being offset by the per contra asset "Customers' Liability for Letters of Credit and Acceptances."

TEST QUESTIONS

1. Trace the relationship existing between the "clearing principle" and foreign exchange transactions. Where is the world's center of the settling of foreign exchange?
2. Name seven kinds of transactions that give rise to debit and credit balances between countries.
3. Distinguish between "clear bills," "documental bills," and "cheques." Between the "commercial" and the "traveler's" letter of credit.
4. Why is the promissory note eliminated from a consideration of the subject of foreign exchange?
5. What is the office of the "trust receipt"?
6. What is the function of the foreign exchange broker? How does he differ from the commercial paper broker?
7. What are the general duties of the manager of the foreign exchange department?
8. What is the "shipping point" in foreign exchange?
9. What are some of the elements of cost involved in a gold shipment?
10. What are some of the considerations that affect quotations on foreign bills of exchange?
11. What is a "bank acceptance"? How is it carried on the bank statement?
12. English money is designated by the term "sterling." Is or is not the pound sterling measured in American money for quotation purposes? How do the quotations of "francs" and "marks" add to the confusion?

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